

# TYM-VS GATE OPERATOR BY TYMETAL CORP.

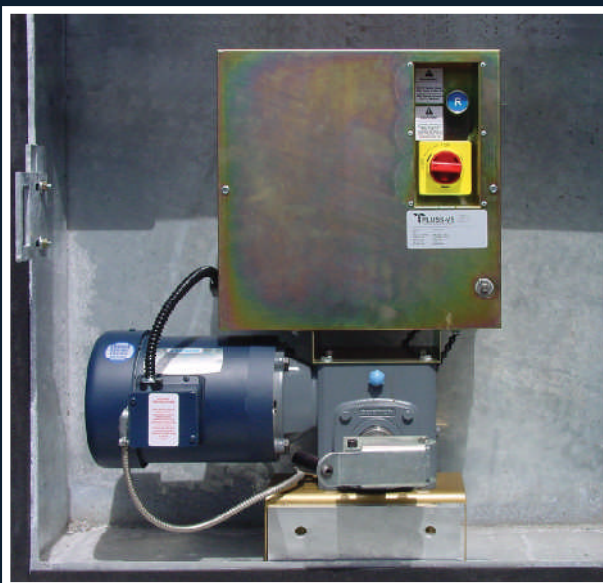
Tymetal Corp. provides a complete gate and gate operator system from a single manufacturer, designed and engineered as a whole, providing low preventative maintenance requirements, long service life, and factory certified 200,000 cycle tested gate and gate operator.

As an innovative manufacturer and as a response to industry requests, Tymetal Corp. has developed the TYM-VS gate operator that is specifically designed to compliment the Tymetal Fortress vehicle gate line.

The TYM-VS gate operator features:

- UL Listing
- Rated for continuous duty
- Built in auto-close timer
- LED diagnostic display for easy service
- Durable - 10 gauge hot-dip galvanized steel enclosure
- SMRT™ Self-Adjusting Maximum Run Timer (Patent Pending)
- Minimum of #50 drive chain
- Built in audio alarm
- Designed for ease of maintenance
- Soft start and soft stop functions with in-between speed adjustable from 1.2 fps to 2.2fps.

...the most cost effective system on the market



# Tymetal Corp.

(800) 328-GATE (4283) • [www.tymetal.com](http://www.tymetal.com)  
Greenwich, NY • Pearland, TX

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## Technical Data

### General:

Variable speed gate operator shall be designed for gate systems that meet the UL 325 Class III and IV requirement. NEMA 4 post mounted motor box.

### AC Drive:

The variable frequency drive unit shall allow for a range of speeds from 1 fps to 2.2 fps with soft start and soft stop features.

### Motor:

The standard electrical motor shall be 1HP 208 VAC, 3 ph, 6 amp. **Power options are: [208 VAC, 1 ph, 11 amp][230 VAC, 3 ph, 5.2amp][230 VAC, 1 ph, 9.5 amp][460 VAC, 3 ph, 2.6 amp].**

### Gearbox and Cabinet Heater:

Provided heaters shall be powered by operator power (except for 460 VAC option).

### Limits:

The operator shall be equipped with an integral limit system, providing accurate settings to control the open and close positions of the gate and shall not be affected by manual operation or motor removal.

### Controller:

The controller shall contain all of the required gate logic components including relays and motor starters with overloads in a NEMA 4 post-mounted enclosure. The controls draw 2 amps of current.

### Audio Alarm:

Dual function alarm

1. The first function is a pre-move/gate-in-motion alarm.
2. The second function is an entrapment notification alarm (Class III). The pulsing rate of the alarm shall be different (faster) than the pre-move/gate alarm.

### Manual Operation:

Emergency manual operation shall be accomplished by unlocking the motor box, folding out the crank handle and cranking the gate open or closed.

### Obstruction Sensing Systems:

**Class III:** For Class III installations, an external primary entrapment protection device shall be either B1 (non-contact) or B2 (contact) sensor and must be installed for OPEN and CLOSE directions. When this equipment is installed, only a momentary contact on the push-button control will start or stop gate movement. The built-in auto-close timer may be used to automatically close the gate from a full open position after a user set time (from 2-60 seconds). The secondary entrapment-protecting device shall be the inherent audio alarm.

**Class IV:** For Class IV installations, the primary entrapment protection device to keep the gate in motion is by maintaining contact pressure on the pushbutton control with the gate in sight. This is the only method by which the gate will stay in motion. When the pushbutton is released, the gate will stop. An auto-close timer shall not be used in Class IV installations. The secondary entrapment device shall be the inherent audio alarm.

### Diagnostic LED's:

The diagnostic LED's shall provide a visual status of the various external devices connected to the TYM-VS (Variable Speed) controller. For normally closed inputs (such as the STOP button), the associated LED will be ON unless the device is activated or disconnected. For normally open inputs (such as the OPEN button), the associated LED will be OFF unless the device is activated.

### Gearbox:

The self-enclosed gear-hand gearbox shall be manufactured as a single unit and shall consist of a hardened steel machine cut worm and mating bronze gear running in oil bath. Oil shall be a #634 specialty oil with a fluid pour point of -44 degrees F. The gearbox shall include:

1. An adjustable clutching device.
2. A disconnect device that can be manually operated by crank handle.

### Drive Chain:

Minimum of #50 roller chain shall be used.

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