

## SERVO ELECTRIC VALVE GATE

A servo driven system that provides absolute control and precision over individual valve pin opening and closing actuation profiles. Fully adjust pin position, acceleration, velocity, stroke, timing and sequence. Critical capabilities that greatly enhances molded part quality for demanding applications. Available for all applications including large automotive parts.

### KEY FEATURES

#### INDIVIDUAL SERVO MOTORS

- Allows for independent adjustments of each valve pin.
- Superior repeatability, process stability and reliability.
- High powered for compatibility with any application.
- Compact dimensions minimize cut-out requirements.

#### PRECISE CONTROL

- Adjust valve pin positions in increments of 0.01mm.
- Actuate with immediate reaction times.
- Individual cavity shut-off capabilities.

#### MULTI-STEP OPEN/CLOSING PROFILES

- Optimize resin flow and balance to improve part quality.
- On-The-Fly fully adjustable opening and closing actuation variables.
- Adjust pin speed throughout each cycle.
- Helps to eliminate visual imperfections like weld lines, hesitation marks and more.

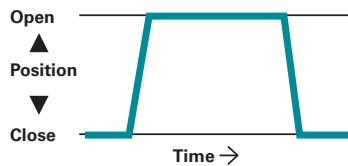
#### ALL ELECTRIC OPERATION

- Reduces energy consumption by up to 60%.
- Viable for clean room applications.
- Environmentally friendly.
- Minimal maintenance requirements.

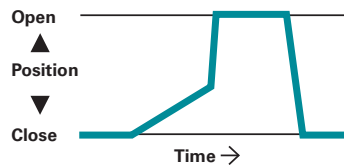


## PROGRAMMABLE PIN MOVEMENTS

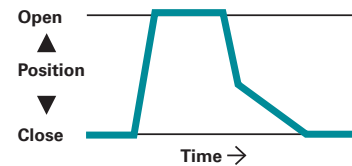
### Conventional Open → Close



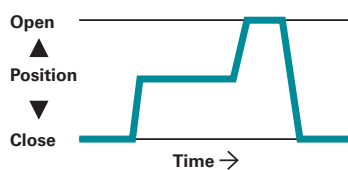
### Slow Open → Fast Open



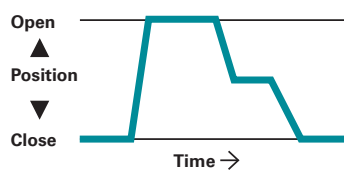
### Fast Close → Slow Close



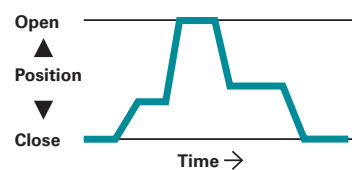
### Intermediate Open Position



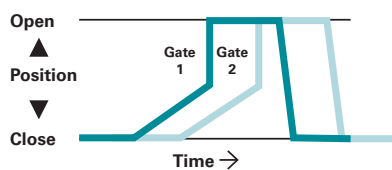
### Intermediate Close Position



### Complex Movements



### Sequential (Timing & Triggers)



#### BENEFITS INCLUDE:

- Flow front speed stabilization.
- Balance control (including differential).
- Packing control (including differential).
- Extended service life of components.

## SPECIFICATIONS

<b>Actuation Motors</b>	Servo (Electric)
<b>Closing Force (Max)</b>	4,000 N
<b>Valve Pin ø Range</b>	2.5 mm - 9.5 mm
<b>Nozzle Shot Range (g)</b>	<1 - 5,000+
<b>Valve Pin Styles</b>	Cylindrical or Tapered
<b>Valve Pin Stroke</b>	0 - 20 mm
<b>Valve Pin Speed (Max)</b>	80 mm/s
<b>Position Accuracy</b>	0.01 mm
<b>Actuation Timing</b>	0.01 s

#### OPTIONS:

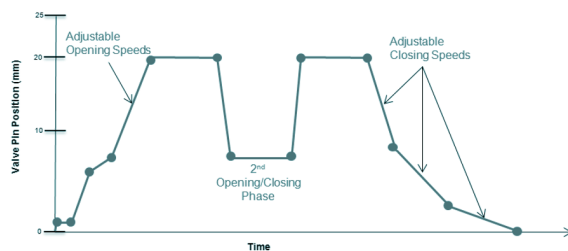
- Integrated TempMaster Hot Runner Temperature Control.

#### COMPATIBLE HOT RUNNER SYSTEMS:

- Fusion-Series G2
- Dura+
- Master-Series
- Summit-Series



## PROGRAMMABLE MULTI-STEP ACTUATION PROFILES



- Allows for a wide range of actuation control flexibility including complex movements within each cycle.
- Program up to (10) Multi-Step Motion Profiles.
- Each step can have individual set-ups (including 2nd Opening/Closing movements).

## TempMaster<sup>TM</sup> series

For peak performance and superior results, Mold-Masters recommends integrating TempMaster hot runner temperature control into all SeVG+ applications. Unlock your operations full potential with TempMaster.

