



# SERVO DRIVEN SYNCHRO PLATE SYSTEM ELIMINATES ACTUATION VARIABILITY

Precise simultaneous valve pin motion control for exceptional process stability. Easily adjust pin stroke, velocity, torque, timing and position to improve mold balance and production quality. Compatible with all resins, E-Drive is ideal for high cavitation, tight tolerance and tight pitch applications across a wide range of industries.

### **KEY FEATURES**

#### **SERVO DRIVEN ACTUATION**

- · Unbeatable precision, control and reliability.
- · Greatest level of process consistency and repeatability.
- · Eliminates actuation variability.

#### **MULTI-STEP ACTUATION PROFILES**

- · Fully adjust opening and closing actuation variables.
- · Optimize resin flow and balance.
- · Greatly improves molded part quality.
- · Prevents defects and scrap.

#### **EXCLUSIVE BALL SCREW & BELT DESIGN**

- Actuate up to 144 cavities with as little as one drive & plate.
- · Highly mechanically efficient (rolling action eliminates friction).
- Minimizes wear to significantly extend service life.
- Consumes up to 60% less energy (than traditional synchro plate designs).

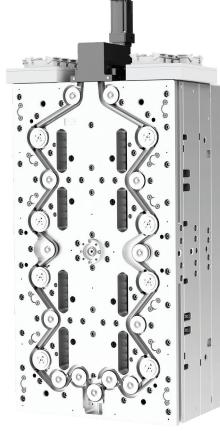
#### **ALL ELECTRIC**

- Suitable for clean room applications.
- No risk of hydraulic mess or disposing of hazardous materials.

# **IN-PRESS ACCESS**

- Easily maintain pins for adjustment and replacement.
- Eliminates the need for disassembly, minimizing downtime.





#### **MAG-PIN TECHNOLOGY**

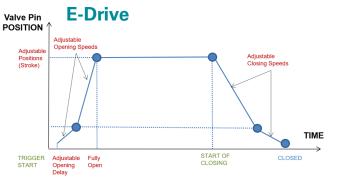
- Quick and easy individual cavity shut-off option.
- · Does not require mold disassembly.
- · Zero downtime.

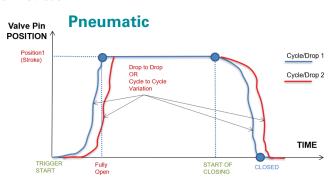




#### **ELIMINATE VARIABILITY**

E-Drive significantly improves process stability by eliminating the drop-to-drop and cycle-to-cycle variability associated with traditional actuation methods.





	E-Drive	Pneumatic	
Fully Adjustable Pin Positions	Yes	No - Open/Close Only	
Fully Adjustable Multi-Step Open/Close Profiles	Yes	No	
Immediate Response Times	Yes	No	
<b>Precision Movements and Positions</b>	Yes	No	
Shot to Shot Consistency	Yes	No	
Drop to Drop Consistency	Yes	No	

#### **SPECIFICATIONS**

Number of Cavities	16-144		
Cavities per Drive (Max)	144		
Actuation Time (Min)	0.1 Sec		
Adjustment Step	0.01 mm		
Valve Pin Diameter	2.5-5 mm		
Stroke Length	2-15 mm		
Plate Dimension (Min)	420 x 420 mm		
Stack Height (Min)	148.55* mm		
Input Power (Controller)	380-480V AC 3 Phase		

<sup>\*</sup>Plus stroke

## **COMPATIBLE NOZZLES**

Nozzle Range	Femto	Pico	Centi	Deci*
Shot Size (g)	5-10	10-20	15-50	50-500
Min Pitch† (mm)	26	28	31	39
Bore Cut-Out Ø (mm)	16	22	26	32
Length Range (mm)	40-205	31-221	25-224	35-253

<sup>\*</sup>Master-Series only

†Standard designs. Tighter pitches may be possible. Please consult MM regarding your application.





# **COMPACT CONTROL**

E-Drive systems are operated with a compact and easy-to-use control unit containing the servo amplifiers and a remote touch screen panel for set-up and monitoring.



#### **FEATURES**

- · Adjustable motion & speed profiles.
- 4 configurable trigger inputs with time delay or IMM signal.
- Adjustable Alarm and Warning limits.
- Option to integrate with TempMaster hot runner temperature control.