

# GGA

**GLASS TONG HEAD GRIPPER**

## ***Glass Container Industry***

*Rugged design and long life for hot glass bottle transferring applications*




**ISO 9001  
REGISTERED**

Quality Management  
System Certified

GGAML01B

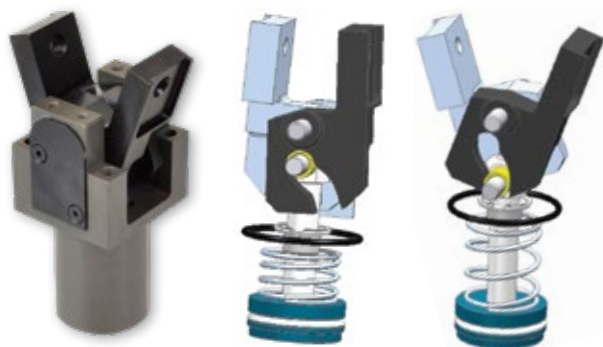
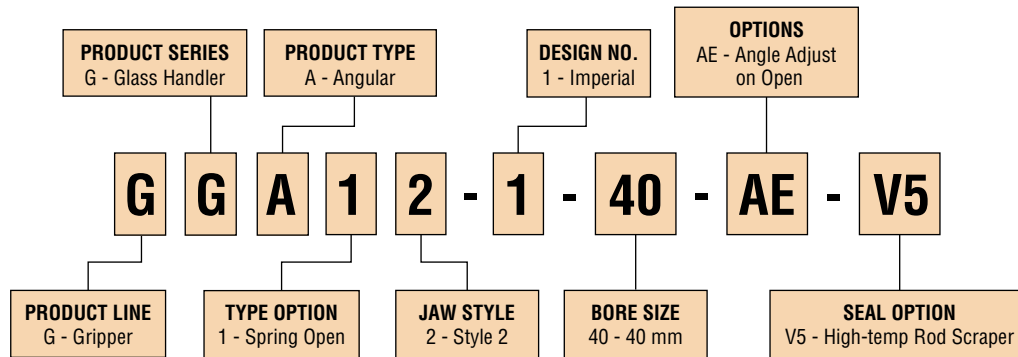


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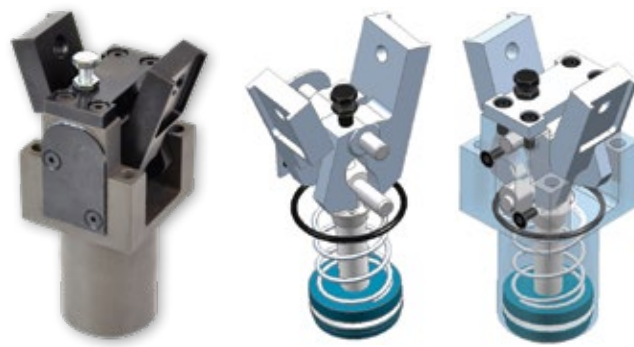
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# ORDERING DATA: SERIES GGA GLASS GRIPPER



**GGA12-1-40** (Non-adjustable)  
Replaces previous ML315988



**GGA12-1-40-AE** (Adjustable)  
Replaces previous ML316195

## BENEFITS: SERIES GGA GLASS GRIPPER

The standard design **GGA12-1-40** includes a locking ramp which locks in place when jaws are full open.

The adjustable opening angle design **GGA12-1-40-AE** uses a cam slot and roller bearing. This design uses a smooth closing with cushioning through the cam slot design. The adjustment screw sets or changes the opening angle.

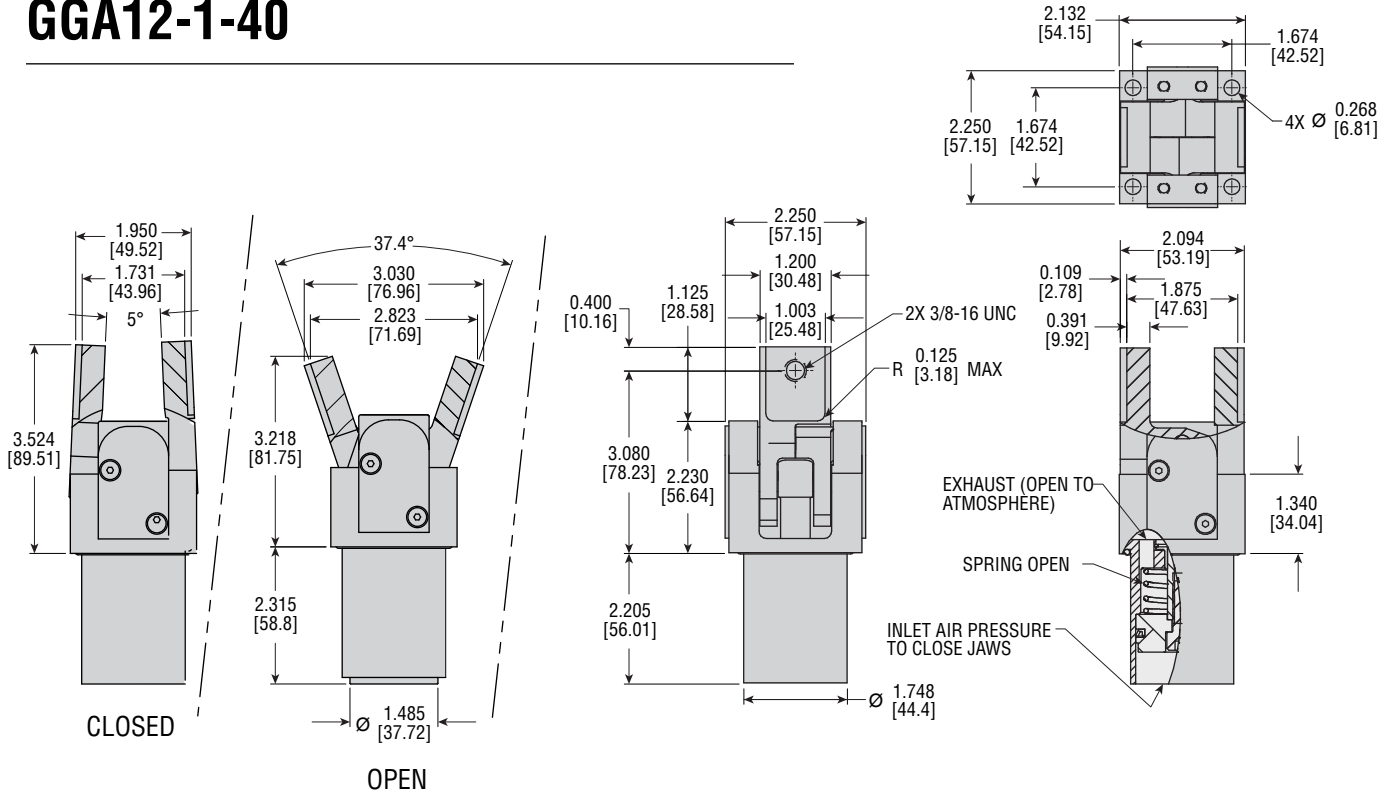
- **Mechanical Locking:** Gripper jaws are locked on full open, thus eliminating jaws and tooling being exposed to additional moments of inertia during gob/bottle transfer onto the conveyor.
- **Cam Slot Design:** For more grip force, the theoretical grip force with the jaws at parallel is about 347N at 6 bar [78 lb at 87 psi] and 85 N at 2 bar [19 lb at 29 psi].
- **Integrated Smooth Closing™:** The cushioning is built into the cam slot of the jaws. This is for handling bottles softly to avoid finish cracks.
- **Very Precise Jaw Movement:** For consistent, repeatable pick up. No pin breaks or jaw play!

- **Drop-in Replacement:** Replaces Emhart, BDF, Bottero, GPS, Lattimer and other glass bottle forming machines
- **Anti-Wink:** Gripper jaws are locked on full open, thus reducing risk of defects in the container mouth rim.
- **Less Downtime:** Designed for more than 10 million cycles
- Easily field repairable, spare parts available upon request

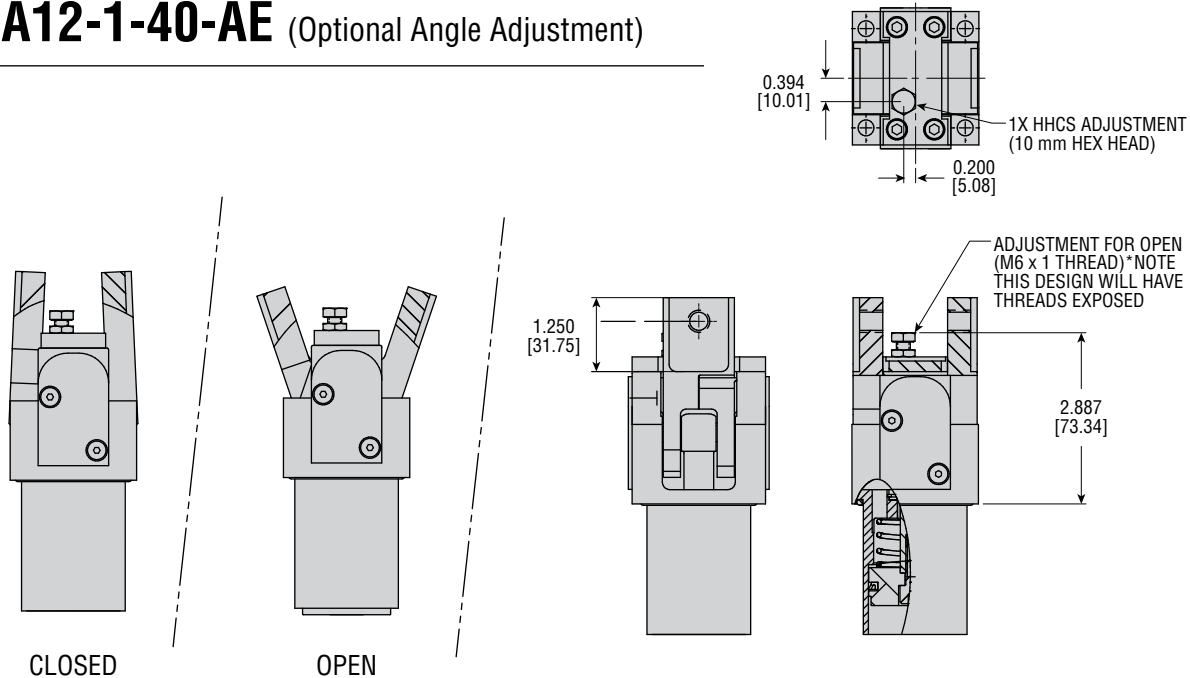
SPECIFICATIONS	SERIES GGA
WEIGHT	30.4 oz [862 g]
BORE	40 mm
JAWS OPEN ANGLE	37.4° (Adjustable on GGA12-1-40-AE)
JAWS FULL CLOSE ANGLE	5°
JAW MATERIAL	Pre-hardened steel
BODY	Coated
SPRING OPEN	Spring installed between body and piston

# DIMENSIONS: SERIES GGA GLASS GRIPPER

## GGA12-1-40



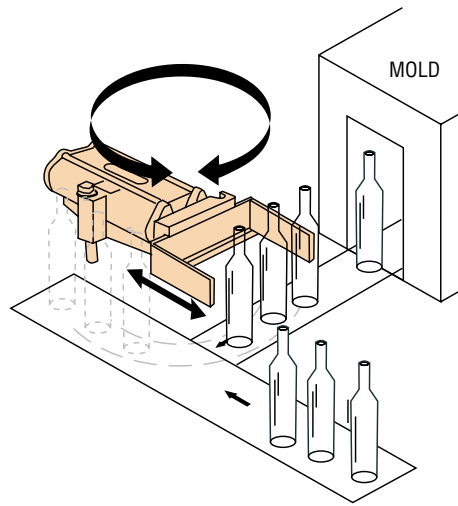
## GGA12-1-40-AE (Optional Angle Adjustment)



### NOTES:

- 1) ALL DIMENSIONS ARE FOR REFERENCE ONLY
- 2) THEORETICAL GRIP FORCE AT PARALLEL IS ABOUT 18 LBS [80 N] AT 30 PSI [2 BAR] AT THREADED HOLES
- 3) SINGLE-ACTING OPERATION: - SPRING OPEN, AIR PRESSURE CLOSED
- 4) UNIT RATED FOR 400°F [204°C]

# OTHER GLASS SOLUTIONS: GLASS PUSHER SLIDE



Hot "ware" (bottles) are removed from the mold and released in front of the Pusher Slide which extends and rotates at the same speed as the adjacent conveyor system, delivering the product to the conveyor.

The PHD slide is designed to handle the high temperature of the environment as well as the dirt and molten glass that migrate onto the moving parts of the slide.

### PRODUCTS:

- ML310814 (Slide and Tool Plate)
- ML310815 (Slide and Tool Plate)
- ML310035 (Slide only)

- Direct replacement for existing angle slides on Bottero and Emhart machines.
- Faster retract speed due to special built-in quick exhaust valve.
- Long life design due to the choice of seals, coatings, close tolerance machining, and assembly withstanding the environment.
- Rod scrapers prevent contamination of internal seals and bearings promoting longer life.
- Lower cost unit offered without position adjuster.
- Easily field repairable with repair and seal kits.
- Energy savings due to larger rods and 20% smaller bores.



Tool plate included.  
Select from the options shown below.

SPECIFICATIONS	GLASS PUSHER SLIDE
TWIN BORE	Ø 1.575 in [40 mm]
STROKE	4.250 ±0.028 in [108 ±0.7 mm]
GUIDE SHAFTS	Ø 1 in [25.4 mm] Hardened, Ground Steel
BODY	PTFE Hardcoat Aluminum
TOOL PLATE	Steel
SEALS	Fluoroelastomer
BUSHINGS	Polymer
CYCLE SPEEDS at 45 psi	
Extend	29.3 in/sec [8.9 m/sec]
Retract	34 in/sec [10.4 m/sec]
CYCLE TIME at 45 psi	
Extend	145 ms
Retract	125 ms



Exhaust Deflector



**\*ML310274**  
(OI/Emhart tool plate)  
Increased dead plate clearance



**\*ML310279**  
(Bottero tool plate)

**\*Also, select the tool plate for your dead plate clearance requirement.**

