



# AGW-250-1 Parallel Gripper

## Wide-Body, Synchronous/Non-Synchronous



### FEATURES AND BENEFITS

- Ultra high gripping force to weight ratio due to four opposing independent pistons that direct power to the jaws.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Large jaw support shafts are guided through the full width of the main body.
- Proximity switches are available to monitor open and closed position of the jaws.
- The AGW Series is fully field repairable for cost savings and minimum down time.
- Non-synchronous versions allow the gripper's jaws to comply to the part's centerline versus the gripper's centerline.

### SPECIFICATIONS

**Design:** Parallel, Double Acting, Synchronized Jaws

**Stroke:** .75 in [19 mm]

**Thrust Force @ 80 PSI [5.5 BAR]**

**Closing:** 20 lbs [89 N]

**Opening:** 26 lbs [115 N]

**Time:**

**Close:** 0.2 sec [0.2 sec]

**Open:** 0.2 sec [0.2 sec]

**Pressure Range:**

**Low/High** 20-120 PSI [1.7-8 BAR]

**Temperature Range:**

**Low/High** -20/ 180F [-28/ 80C ]

**Side Play:**

± 0.001 [.03 mm]

**Repeatability from Center:**

± 0.002 [.06 mm]

**Loading Capacity:**

	Static	Dynamic
Max Tensile T	50 lbs [230 N]	10 lbs [44.5 N]
Max Compressive C	50 lbs [230 N]	10 lbs [44.5 N]

**Max Moment  $M_x$**  100 in/lb [11.3 Nm] 20 in/lb [2.3 Nm]

**Max Moment  $M_y$**  150 in/lb [17 Nm] 30 in/lb [3.4Nm]

**Max Moment  $M_z$**  100 in/lb [11.3 Nm] 20 in/lb [2.3 Nm]

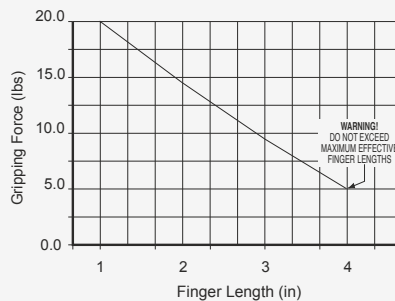
**Material:** High Strength, Hard Coated aluminum bronze alloys, Steel

**Weight:** 11 oz [311 g]

**Piston Diameter:** .500 in x 4 [12.7 mm]

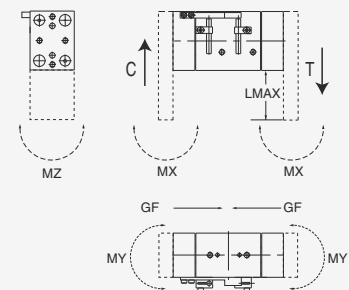
January 2009 - PATENTED Made in the USA

### HOLDING FORCES CHART



**WARNING!** Do not exceed tooling jaw length. See Chart above.

### LOADING INFORMATION



**LOOK!** More Technical specifications for sensors on "Sensors Accessories" page.

### HOW TO ORDER

When ordering, please specify:  
Design/Model Number and Options.

#### DESIGN/MODEL

AGW-250-1  
AGW-250-2  
AGW-250-3

#### SENSOR OPTIONS

1 = CLOSED  
2 = OPEN  
3 = BOTH

#### SENSOR TYPE\*

1 = NPN  
2 = PNP

**AGW-250** - **M** - **NS** - **3** - **1** - **1**

**TYPE**  
M = METRIC  
= IMPERIAL

**NON-SYNCHRONIZED OPTION**

#### SENSOR CONNECTOR

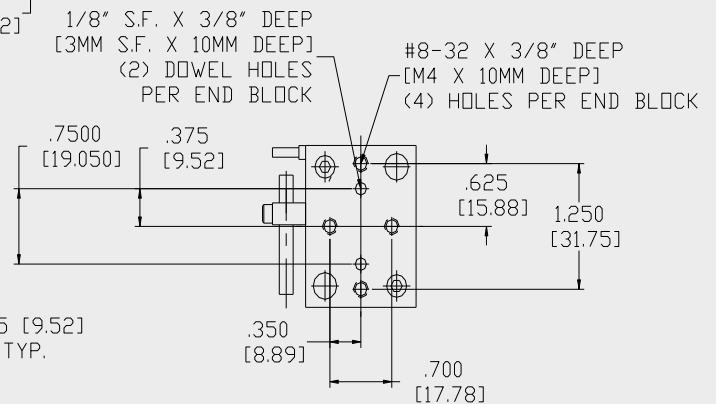
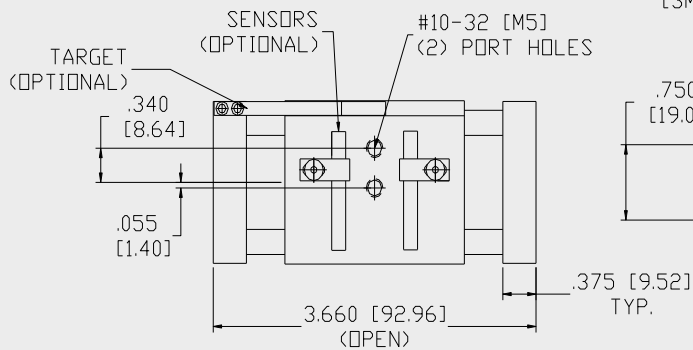
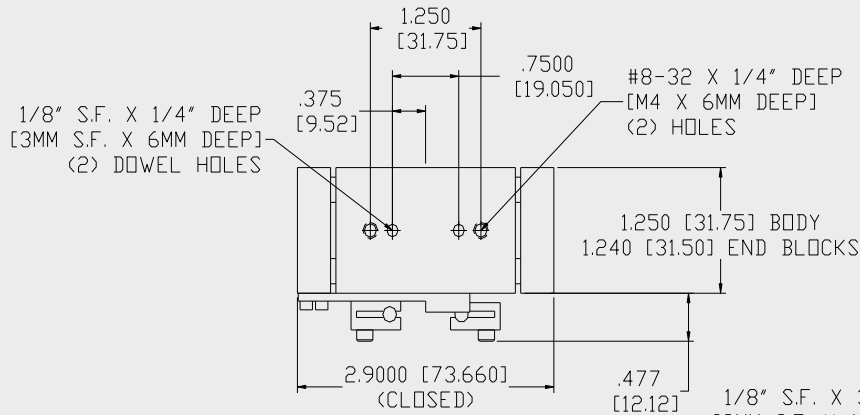
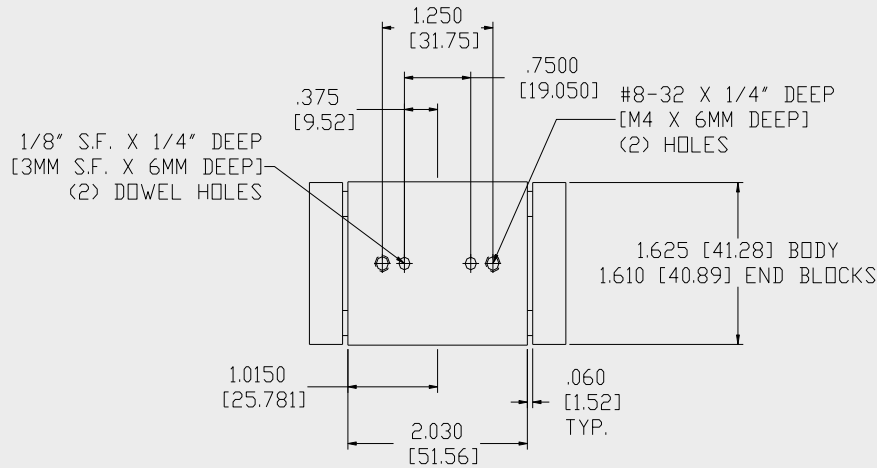
1 = POTTED  
2 = QUICK DISCONNECT  
3 = QUICK DISCONNECT WITH RIGHT ANGLE

\* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC04, SPC04, SPQ04

# AGW-250-1 Parallel Gripper

## Wide-Body, Synchronous/Non-Synchronous



**Unless noted, all tolerances are as indicated here:**



All Dowel Holes are SF (Slip Fit) Locational Tolerance  $\pm .0005"$  [0.013mm]



Metric Threads Course Pitch

Imperial: Inch

0.00 =  $\pm .01$   
0.000 =  $\pm .005$   
0.0000 =  $\pm .0005$

Metric: [0.] =  $\pm .25$   
[0.0] =  $\pm .13$   
[0.00] =  $\pm .013$