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:** 4 in [101.6 mm]

**Gripping Force @ 80 PSI Per Jaw [5.5 BAR]**

- Closing: 84 lbs [373 N]
- Opening: 86 lbs [383 N]

**Time:**
- Close: 0.5 sec [0.5 sec]
- Open: 0.5 sec [0.5 sec]

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

**Temperature Range:**
- Low/High -20˚/180˚F [-28˚/80˚C]

**Side Play:** ± 0.001 [.03 mm]

**Repeatability from Center:** ± 0.002 [.06 mm]

**Loading Capacity:**

<table>
<thead>
<tr>
<th>Material</th>
<th>Max Tensile T</th>
<th>Dynamic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Static</td>
<td>500 lbs</td>
</tr>
<tr>
<td></td>
<td>[2220 N]</td>
<td>[222 N]</td>
</tr>
<tr>
<td></td>
<td>Max Compressive C</td>
<td>500 lbs</td>
</tr>
<tr>
<td></td>
<td>[2220 N]</td>
<td>[222 N]</td>
</tr>
<tr>
<td></td>
<td>Max Moment M_x</td>
<td>500 in/lb</td>
</tr>
<tr>
<td></td>
<td>[56.5 Nm]</td>
<td>[5.6 Nm]</td>
</tr>
<tr>
<td></td>
<td>Max Moment M_y</td>
<td>750 in/lb</td>
</tr>
<tr>
<td></td>
<td>[85 Nm]</td>
<td>[8.5Nm]</td>
</tr>
<tr>
<td></td>
<td>Max Moment M_z</td>
<td>500 in/lb</td>
</tr>
<tr>
<td></td>
<td>[56.5 Nm]</td>
<td>[5.6 Nm]</td>
</tr>
</tbody>
</table>

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

**Weight:** 6 lbs [2.7 kg]

**Piston Diameter:** .875 in x 4 [22.3 mm]

January 2009 - PATENTED Made in the USA

LOADING INFORMATION

**HOLDING FORCES CHART**

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

SENSOR TYPE*

<table>
<thead>
<tr>
<th>SENSOR OPTIONS</th>
<th>1 = CLOSED</th>
<th>2 = OPEN</th>
<th>3 = BOTH</th>
</tr>
</thead>
</table>

**SENSOR CONNECTOR**

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

**SENSOR PART #**

SNQ04, SNC04, SPC04, SPQ04

HOW TO ORDER

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

<table>
<thead>
<tr>
<th>DESIGN/MODEL</th>
<th>SENSOR OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGW-250</td>
<td>1 = CLOSED</td>
</tr>
<tr>
<td>AGW-375-1</td>
<td>2 = OPEN</td>
</tr>
<tr>
<td>AGW-375-2</td>
<td>3 = BOTH</td>
</tr>
<tr>
<td>AGW-375-4</td>
<td>1 = NPN</td>
</tr>
<tr>
<td>AGW-500-1</td>
<td>2 = PNP</td>
</tr>
<tr>
<td>AGW-500-2</td>
<td>3 = QUICK DISCONNECT</td>
</tr>
<tr>
<td>AGW-500-4</td>
<td>1 = QUICK DISCONNECT WITH RIGHT ANGLE</td>
</tr>
</tbody>
</table>

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

Sensor Part # SNQ04, SNC04, SPC04, SPQ04
AGW-500-4 Parallel Gripper
Wide-Body, Synchronous/Non-Synchronous

Unless noted, all tolerances are as indicated here:

- All Dowel Holes are SF (Slip Fit) Locational Tolerance ± .0005" [.013mm]
- Metric Threads
  - Course Pitch
  - Imperial: 0.00 = ±.01
  - Metric: 0.00 = ±.013

American Grippers, Inc.
171 Spring Hill Road, Trumbull, CT 06611
Tel: 203-459-8345 Fax: 203-452-5943
info@AGI-Automation.com www.AGI-Automation.com