**AGPS-1-2 Parallel Gripper**  
Single Finger, One Fixed Jaw

**FEATURES AND BENEFITS**
- T-Slot bearing support for the carriage and end plate offers superior load bearing performance throughout the stroke.
- Standard built-in stroke adjustment and stroke lock for precise, repetitive operation.
- Compact, lightweight unit with built-in cylinder.
- Piston seals are U-CUP type for long service life.
- Hall Effect sensors are available to monitor stroke position.
- Multiple mounting surfaces on the body and endplate with threaded and counterbored holes for easy mounting choices.
- Adjustable stroke on extend and retract.

### SPECIFICATIONS

**Design:**  
Built-in air cylinder  
T-slot slide

**Stroke:**  
1 inch [25.4 mm]

**Thrust Force @ 80 PSI [5.5 BAR]**
- Extended: 15 lbs [66.7 N]
- Retract: 13 lbs [57.8 N]

**Recommended Speed:**
- 2-12 in/sec  
[0.5-.3m/sec]

**Pressure Range:**
- Low/High: 20-120 PSI [1.4-8 BAR]

**Temperature Range:**
- Low/High: -20˚/150˚F [-28˚/80˚C]

**Side Play:**
± 0.001 [.03 mm]

**Maximum Payload:**
7 lbs [3.2 kg]

**Material:** High Strength, Aluminum Alloys, Bronze

**Weight:**
3.2 oz [90 g]

**Piston Diameter:**  
.50 in [12.7 mm]

**January 2008 - PATENTED  Made in the USA**

### MAXIMUM FORCES & MOMENTS

<table>
<thead>
<tr>
<th></th>
<th>Static</th>
<th>Dynamic</th>
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<tbody>
<tr>
<td>Max Tensile T</td>
<td>75 lbs [333 N]</td>
<td>32 lbs [142 N]</td>
</tr>
<tr>
<td>Max Compressive C</td>
<td>75 lbs [333 N]</td>
<td>32 lbs [142 N]</td>
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<tr>
<td>Max Moment M_x</td>
<td>60 in/lb [6.7 Nm]</td>
<td>30 in/lb [3.4 Nm]</td>
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<tr>
<td>Max Moment M_y</td>
<td>60 in/lb [6.7 Nm]</td>
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<tr>
<td>Max Moment M_z</td>
<td>60 in/lb [6.7 Nm]</td>
<td>30 in/lb [3.4 Nm]</td>
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### HOW TO ORDER

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

**SENSOR TYPE**
- 1 = NPN  
- 2 = PNP

**SENSOR OPTIONS**  
- 1 = LEFT  
- 2 = RIGHT  
- 3 = BOTH

**SENSOR CONNECTOR**
- 1 = POTTED  
- 2 = QUICK DISCONNECT  
- 3 = QUICK DISCONNECT WITH RIGHT ANGLE

*NOTE: Hall Effect sensors – Potted or Quick disconnect.  
Sensor Part # SHN01, SHP01, SHNQ3, SHPQ3*
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
  0.000 = ±.005
  0.0000 = ±.0005
- Metric: [mm] 0.0 = ±.25
  [0.0] = ±.13
  [0.00] = ±.013

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