**AGP-83 Three Jaw Parallel Gripper**  
**T-Slot Bearing Series**

### FEATURES AND BENEFITS
- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- High gripping force to weight ratio.
- Compact design with long stroke.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Hall effect sensors are available to monitor open and closed position of the jaws.
- AGP is fully field repairable for cost savings and minimum down time.
- Multiple mounting surfaces on jaw for easy tooling.
- Optional stripper plate ensures part preload in location upon release.

### SPECIFICATIONS
- **Design:** Parallel, Double Acting, Synchronized Jaws
- **Stroke:** .88 in [22.3 mm]
- **Gripping Force @ 80 PSI [5.5 BAR]**
  - Closing: 280 lbs [1245 N]
  - Opening: 285 lbs [1267 N]
- **Time:**
  - Close: 0.22 sec [0.22 sec]
  - Open: 0.22 sec [0.22 sec]
- **Pressure Range:**
  - Low/High: 30-120 PSI [2-8 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:**
  - **Max Tensile T:** 2100 lbs [9300 N]
  - **Max Compressive C:** 2100 lbs [9300 N]
  - **Max Moment Mx:** 2100 in/lb [237 Nm]
  - **Max Moment My:** 2100 in/lb [237 Nm]
  - **Max Moment Mz:** 1600 in/lb [180 Nm]
- **Material:** High Strength, Hard Coated aluminum bronze alloys, Steel
- **Weight:** 6.0 lbs [2.7 kg]
- **Piston Diameter:** 3.5 in [89 mm]

January 2009 - PATENTED Made in the USA

### HOLDING FORCES CHART

### LOADING INFORMATION

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

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

### HOW TO ORDER

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

<table>
<thead>
<tr>
<th>DESIGN/MODEL</th>
<th>TYPE</th>
<th>SENSOR OPTIONS</th>
<th>SENSOR Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGP-83</td>
<td>M</td>
<td>1 = CLOSED</td>
<td>1 = POTTED</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2 = OPEN</td>
<td>2 = QUICK DISCONNECT</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>3 = BOTH</td>
<td>3 = QUICK DISCONNECT WITH RIGHT ANGLE</td>
</tr>
</tbody>
</table>

**SIZE:** 23, 43, 63, 83

**SENSOR Options**
- 1: CLOSED
- 2: OPEN
- 3: BOTH

**SENSOR Connector**
- 1: POTTED
- 2: QUICK DISCONNECT
- 3: QUICK DISCONNECT WITH RIGHT ANGLE

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

Sensor Part #: SHN02, SHNQ4, SHP02, SHPQ4
AGP-83 Three Jaw Parallel Gripper  
T-Slot Bearing Series

Unless noted, all tolerances are as indicated here:

All Dowel Holes are SF (Slip Fit) Locational Tolerance ± .0005" [.013mm]

Metric Threads

Imperial: 0.00 = ±.01
0.000 = ±.005
0.0000 = ±.0005

Metric: [0.] = ±.25
[0.0] = ±.13
[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