**FEATURES AND BENEFITS**

- Built in adjustable hardstops on output flange stops against a dowel pin imbedded in the body to prevent pinion breakage, and give accurate specific rotation requirements.
- Two large bearings, one on either side of the pinion, provides for steady output flange with high loading capacity.
- Ultra high torque to weight ratio for faster cycle times.
- Compact body design to fit into tight space applications.
- Units are permanently lubricated for non-lube air operation, allowing compliance with OSHA regulations.
- All rotary units have zero backlash at either end of rotation, this keeps the output flange against the hard stop.
- Built in adjustable flow controls allow for maximum cycle times and smooth deceleration.
- Proximity switches are available to monitor end of rotation.
- The AGR unit is fully repairable for cost savings and minimum down time.

**SPECIFICATIONS**

- **Design:** Rack and Pinion with Flange Hard Stop
- **Rotation Range:** 0°-180° (Adj. +/- 5°)
- **Payload:** 30 lbs central to axis of rotation [13.6 Kg]
- **Torque:** @80 psi [5.5 BAR] 248 in/lb [28 Nm]
- **Bearing Load:**
  - Dynamic: 1495 lbs [6650 N]
  - Static: 2260 lbs [10050 N]
- **Rotation Time:** No load .40 second
- **Pressure Range:** Low/High 30-120 PSI [2-8 BAR]
- **Temperature Range:** Low/High -20˚/180˚F [-28˚/80˚C]
- **Backlash:** Zero
- **Accuracy:** .001 concentric and perpendicular to axis of rotation
- **Material:** High Strength, Hard Coated Aluminum Alloys, Steel
- **Weight:** 8.5 lb [3.9 kg]
- **Piston Diameter:** (2x) 1.625 in [41.3 mm]

January 2009 - PATENTED Made in the USA

**LOADING INFORMATION**

<table>
<thead>
<tr>
<th></th>
<th>Static</th>
<th>Dynamic</th>
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</thead>
<tbody>
<tr>
<td>Max Tensile T</td>
<td>800 lbs [3558 N]</td>
<td>160 lbs [711 N]</td>
</tr>
<tr>
<td>Max Compressive C</td>
<td>2000 lbs [8800 N]</td>
<td>400 lbs [1780 N]</td>
</tr>
<tr>
<td>Max Moment Mx</td>
<td>1000 in/lb [113 Nm]</td>
<td>200 in/lb [22.6 Nm]</td>
</tr>
<tr>
<td>Max Moment My</td>
<td>1000 in/lb [113 Nm]</td>
<td>200 in/lb [22.6 Nm]</td>
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**WARNING!** Do not exceed tooling jaw length.

**HOW TO ORDER**

When ordering, please specify:
- **Design/Model Number and Options.**
- **SENSOR TYPE**
  - 1 = NPN
  - 2 = PNP
- **SENSOR CONNECTOR**
  - 1 = POTTED
  - 2 = QUICK DISCONNECT
  - 3 = QUICK DISCONNECT WITH RIGHT ANGLE

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**DESIGN/MODEL**
- AGR-3
- AGR-4
- AGR-5

**DEGREE OF ROTATION**
- 180°
- 90°

**SENSOR OPTIONS**
- 1 = CLOSED
- 2 = OPEN
- 3 = BOTH

**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 # SPC05, SPQ05, SNC05, SNQ05
AGR-5 Rotary Actuator
Low Profile, Zero Backlash

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 0.0000 = ±.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
AGR-5 Rotary Actuator
Low Profile, Zero Backlash, Optional Rotary Manifold

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
- Metric:
  - 0.000 = ± .0005

-M option
Rotary Manifold shown shaded