AGPS-1-1 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:** .5 in adj [12.7 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 [0.5-3 m/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:** 3 lbs [1.3 kg]
- **Material:** High Strength, Aluminum Alloys, Bronze
- **Weight:** 2.5 oz [70.1 g]
- **Piston Diameter:** .50 in [12.7 mm]
- **January 2008 - PATENTED Made in the USA**

MAXIMUM FORCES & MOMENTS

- **Max Tensile T**
  - Static: 50 lbs [222 N]
  - Dynamic: 20 lbs [89 N]
- **Max Compressive C**
  - Static: 50 lbs [222 N]
  - Dynamic: 20 lbs [89 N]
- **Max Moment Mx**
  - Static: 25 in/lb [2.8 Nm]
  - Dynamic: 15 in/lb [1.7Nm]
- **Max Moment My**
  - Static: 30 in/lb [3.4 Nm]
  - Dynamic: 15 in/lb [1.7Nm]
- **Max Moment Mz**
  - Static: 30 in/lb [3.4 Nm]
  - Dynamic: 15 in/lb [1.7Nm]

HOW TO ORDER

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

- **DESIGN/MODEL**
  - AGPS-1-1
  - AGPS-1-2
  - AGPS-1-3
  - AGPS-1-4

- **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

Sensor Part #: SHN01, SHP01, SHNQ3, SHPQ3

* NOTE: Hall Effect sensors – Potted or Quick disconnect.
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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
  - Inch: 0.000 = ±.005
  - Metric: [0] = ±.025

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