AGPS-1-3 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: 1.5 in [38.1 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 [0.03 mm]

Maximum Payload: 12 lbs [5.4 kg]

Material: High Strength, Aluminum Alloys, Bronze

Weight: 4 oz [113 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>100 lbs [444 N]</td>
<td>42 lbs [186 N]</td>
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<tr>
<td>Max Compressive C</td>
<td>100 lbs [444 N]</td>
<td>42 lbs [186 N]</td>
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<tr>
<td>Max Moment M_x</td>
<td>80 in/lb [9 Nm]</td>
<td>40 in/lb [4.5 Nm]</td>
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<tr>
<td>Max Moment M_y</td>
<td>80 in/lb [9 Nm]</td>
<td>40 in/lb [4.5 Nm]</td>
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<tr>
<td>Max Moment M_z</td>
<td>80 in/lb [9 Nm]</td>
<td>40 in/lb [4.5 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

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AGPS-1-3  Parallel Gripper
Single Finger, One Fixed Jaw

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: [0.] = ± .25
[0.0] = ± .13
[0.00] = ± .013

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