

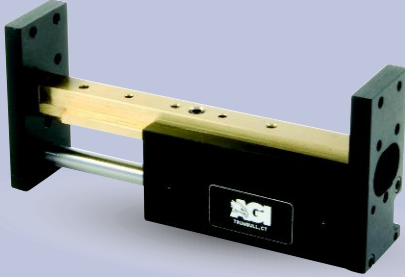


# AGPS-1-3 Parallel Gripper

## 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-.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:** 12 lbs [5.4 kg]

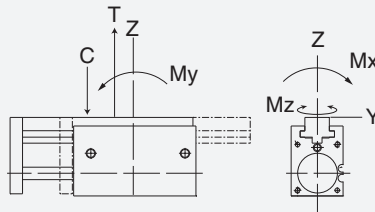
**Material:** High Strength, Aluminum Alloys, Bronze

**Weight:** 4 oz [113 g]

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

January 2008 - PATENTED Made in the USA

### MAXIMUM FORCES & MOMENTS



	Static	Dynamic
Max Tensile T	100 lbs [444 N]	42 lbs [186 N]
Max Compressive C	100 lbs [444 N]	42 lbs [186 N]
Max Moment $M_x$	80 in/lb [9 Nm]	40 in/lb [4.5 Nm]
Max Moment $M_y$	80 in/lb [9 Nm]	40 in/lb [4.5 Nm]
Max Moment $M_z$	80 in/lb [9 Nm]	40 in/lb [4.5 Nm]

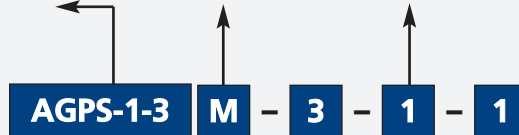
### HOW TO ORDER

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

**DESIGN/MODEL**

- AGPS-1-1
- AGPS-1-2
- AGPS-1-3
- AGPS-1-4

**METRIC**



**SENSOR OPTIONS\***

- 1 = LEFT
- 2 = RIGHT
- 3 = BOTH

**SENSOR TYPE**

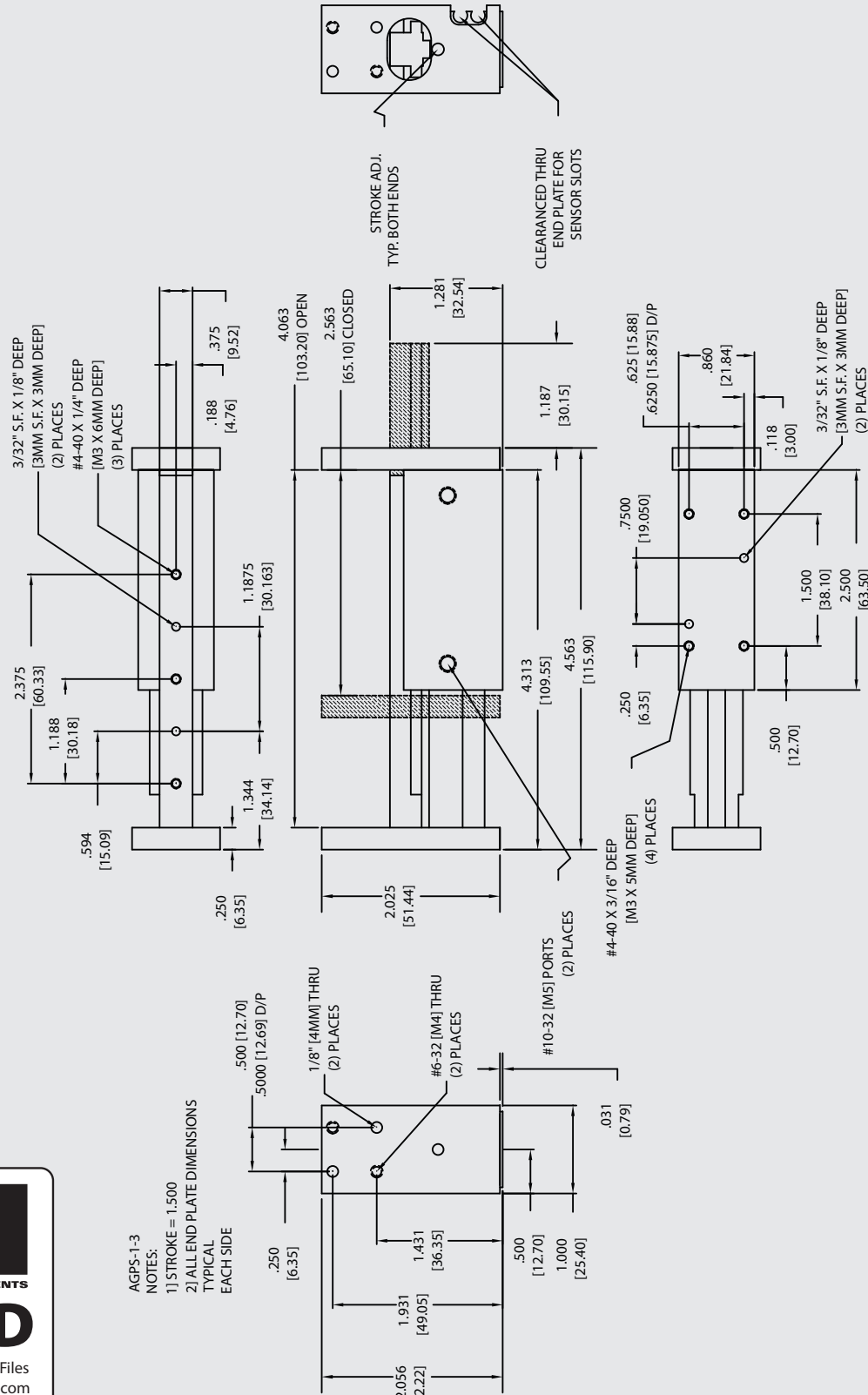
- 1 = NPN
- 2 = PNP

**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



AGPS-1-3

- NOTES:  
1) STROKE = 1.500  
2) ALL END PLATE DIMENSIONS  
TYPICAL  
EACH SIDE



Unless noted, all tolerances are as indicated here:



All Dowel Holes are SF (Slip Fit) Locational Tolerance ± .0005" [0.13mm]



Metric Threads Course Pitch

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

Metric: [.] = ±.25  
[mm] [0.] = ±.13  
[0.00] = ±.013