AGW-500-1 Parallel Gripper
Wide-Body, Synchronous/Non-Synchronous

**SPECIFICATIONS**

**Design:** Parallel, Double Acting, Synchronized Jaws

**Stroke:** 1.5 in [38.1 mm]

**Gripping Force @ 80 PSI Per Jaw [5.5 BAR]**
- Closing: 84 lbs [373 N]
- Opening: 86 lbs [383 N]

**Time:**
- Close: 0.3 sec [0.3 sec]
- Open: 0.3 sec [0.3 sec]

**Pressure Range:**
- Low/High: 20-120 PSI [1.7-8 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:**
- **Static**
  - Max Tensile T: 500 lbs [2220 N]
  - Max Compressive C: 500 lbs [2220 N]
- **Dynamic**
  - Max Moment Mₓ: 500 in/lb [56.5 Nm]
  - Max Moment Mᵧ: 750 in/lb [85 Nm]
  - Max Moment Mᵦ: 500 in/lb [56.5 Nm]

**Material:** High Strength, Hard Coated aluminum bronze alloys, Steel

**Weight:** 3 lbs [1.4 kg]

**Piston Diameter:** .875 in x 4 [22.3 mm]

January 2009 - PATENTED Made in the USA

**FEATURES AND BENEFITS**

- Ultra high gripping force to weight ratio due to four opposing independent pistons that direct power to the jaws.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Large jaw support shafts are guided through the full width of the main body.
- Proximity switches are available to monitor open and closed position of the jaws.
- The AGW Series is fully field repairable for cost savings and minimum down time.
- Non-synchronous versions allow the gripper’s jaws to comply to the part’s centerline versus the gripper’s centerline.

**HOLDING FORCES CHART**

**LOADING INFORMATION**

**WARNING!** Do not exceed maximum effective finger lengths.
See Chart above.

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

**LOADING INFORMATION**

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

**HOW TO ORDER**

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

**DESIGN/MODEL**
- AGW-250
- AGW-375-1
- AGW-375-2
- AGW-375-4
- AGW-500-1
- AGW-500-2
- AGW-500-4
- AGW-625-2
- AGW-625-4
- AGW-625-6

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

**SENSOR CONNECTOR**
- 1 = POTTED
- 2 = QUICK DISCONNECT
- 3 = QUICK DISCONNECT WITH RIGHT ANGLE

**SENSOR TYPE**
- 1 = NPN
- 2 = PNP

**NON-SYNCHRONIZED OPTION**

- M = METRIC
- = IMPERIAL

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

Sensor Part # SNQ04, SNC04, SPC04, SPQ04

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AGW-500-1 Parallel Gripper
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Unless noted, all tolerances are as indicated here:

- All Dowel Holes are SF (Screw Fit) Locational Tolerance ± .0005" [.013mm]
- Metric Threads Course Pitch
  - Imperial: 0.00 = ±.01
  - Metric: 
    - Inch: 0.0000 = ±.005
    - [mm]: 0.0000 = ±.0005

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