

















AGP-OR Series
AGPM Series
AGLP Series
AGP Series
AGPT Series
AGW Series
AGM Series



Innovative tools for automated 'O'-ring and/or seal installation

Available in the following sizes:

AGP-6-OR. A six jaw/six ejector, multi-motion unit, that handles up to 3.000" i.d. seals and/or 'O'-rings. This unit has independent spreading and ejector movements.

AGP-8-OR. An eight jaw/eight ejector, multi-motion, thru-hole unit, that handles up to 12.000" i.d. seals and/or 'O'-rings. This unit has the same independent spreading and ejector movements of the AGP-6-OR, but offers both the capacity for larger diameter 'O'-rings as listed and a 1.500" diameter thru-hole for requirements that deal with long shaft installations/assemblies.

Both the AGP-6-OR & the AGP-8-OR are designed to facilitate part ejection and part seating, which may become necessary after 'O'-ring/seal placement.

Function:

These tools have two independent pneumatic pistons; the parallel jaws, or spreading jaws, which are double acting, and the ejector jaws, which are single acting. In 'O'-ring installation applications, the air pressure is applied to the first piston which facilitates the spreading jaws' expansion of the 'O'-ring in either a hexagonal or octagonal shape. [An 'O'-ring expanded in this manner offers considerably less deformation during the assembly insertion process.] Once the 'O'-ring is expanded and over the target, air pressure is applied to the second piston. This causes the ejector jaws to push the 'O'-ring away from the spreading jaws, and thus into or onto the assembly.

These 'O'-ring-installing units can be tooled to accommodate all types of rings/seals, ranging from the minute to 12.000" in diameter. The opening stroke of the spreading jaws can also be adjusted via a set-screw to prevent over-expansion. End of stroke sensing is available for both spreading and ejector jaws.

Dimensions:

AGP-6-OR - 2.500" diameter x 2.700" length.

Spreading jaws - 62 lbs. of force.

Ejector jaws - 80 lbs. of force.

AGP-8-OR - 5.000" diameter x 5.000" length.

Spreading jaws - 200 lbs. of force.

Ejector jaws - 320 lbs. of force.

[Note: Forces given @80 psi.]

Two and 3D CAD drawings available on our web site, www.agi-automation.com



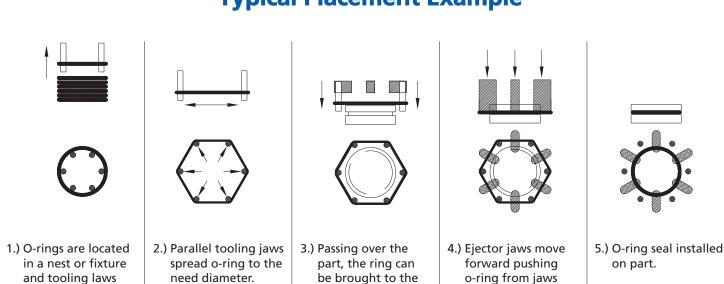
enter I.D.

Dual Motion Grippers Pick and Seat





Typical Placement Example



Detailed product specifications and CAD drawings on following pages.

onto part.

groove.



AGP-6-OR Parallel Gripper

6-Finger Gripper for Placing O-Rings, T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- Spreading jaws and Ejector jaws have independent pistons to provide exact timing of O-ring placement.
- Compact design with long adjustable stroke.
- True parallel jaw motion for easy tooling.
- Available in Metric only.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Sealed Jaws

Stroke: Spread [15 mm] 0.6 in. adj.

Ejecting 0.25 in [6.3 mm]

Gripping Force Per Jaw @ 80 PSI [5.5 BAR] Spreading Jaw: 62 lbs [275 N] 80 lbs [355 N] Ejector Jaw:

Time:

Close: 0.2 sec [0.2 sec] 0.2 sec [0.2 sec] Open:

Pressure Range:

30-100 PSI [2-7 BAR] Low/High

Temperature Range:

Low/High -20°/180°F [-28°/80°C] **Side Play:** ± 0.001 [.03 mm]

Repeatability from center:

±.002 [.06 mm]

Loading Capacity:

Static **Dynamic** Max Tensile T 60 lbs 20 lbs [260 N] [88 N] Max Compressive C 60 lbs 20 lbs [260 N] [88 N]

100 in/lb 25 in/lb Max Moment M_x [2.7 Nm] [11 Nm] Max Moment Mv 120 in/lb 30 in/lb [13 Nm] [3.3 Nm] Max Moment M₇ 100 in/lb 25 in/lb [11 Nm] [2.7 Nm]

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

1.25 lbs Weight: [.56 Kg] **Piston Diameter:** 1.00 in [25.4 mm]

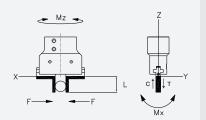
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HOLDING FORCES CHART

POUNDS 50-40-30-20 **INCHES**

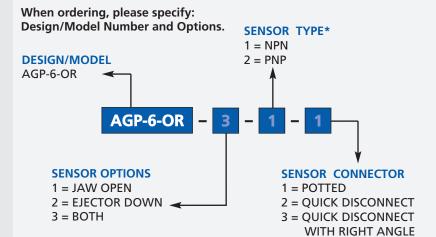
WARNING! Do not exceed tooling jaw length. See Chart above.

LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

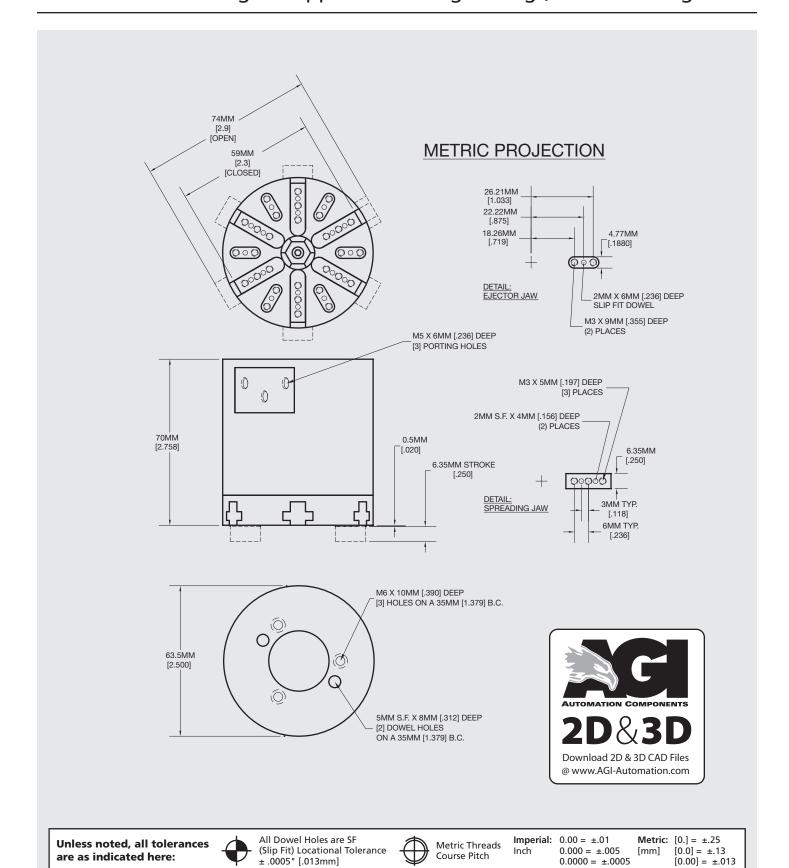


* NOTE: Proximity sensors are 4 mm dia., 12-30 VDC, 50 mA and comes with 2 meter cable.

Sensor Part # SNC06, SNQ06, SPC06, SPQ06



AGP-6-OR Parallel Gripper 6-Finger Gripper for Placing O-Rings, T-Slot Bearing Series





AGP-8-OR Parallel Gripper

8-Finger Gripper for Placing O-Rings, T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- Spreading jaws and Ejector jaws have independent pistons to provide exact timing of O-ring placement.
- Compact design with long adjustable stroke.
- True parallel jaw motion for easy tooling.
- Hole through center facilitates part seating and ejection.
- Available in Imperial only.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Sealed Jaws

Stroke: Spread 1.10 in. adj. [27.9 mm] Ejecting 0.55 in [13.9 mm]

Gripping Force Per Jaw @ 80 PSI [5.5 BAR]

 Spreading Jaw:
 200 lbs
 [889 N]

 Ejector Jaw:
 310 lbs
 [1378 N]

Time:

Close: 0.2 sec [0.2 sec]
Open: 0.2 sec [0.2 sec]

Pressure Range:

Low/High 30-100 PSI [2-7 BAR]

Temperature Range:

Low/High -20°/180°F [-28°/80°C] **Side Play:** ± 0.001 [.03 mm]

Static

Repeatability from center:

±.002 [.06 mm]

Dynamic

Loading Capacity:

Max Tensile T 100 lbs 30 lbs [445 N] [130 N] Max Compressive C 100 lbs 30 lbs [445 N] [130 N] 200 in/lb 50 in/lb Max Moment M_x [22 Nm] [6 Nm] Max Moment Mv 230 in/lb 60 in/lb [23 Nm] [6 Nm] 200 in/lb Max Moment M₇ 50 in/lb [22 Nm] [6 Nm]

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

Weight: 8 lbs [3.6 Kg]

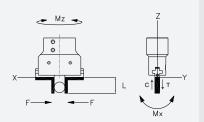
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HOLDING FORCES CHART

200 WARNING! DO NOT EXCEED MAXIMUM FINES LENGTHS 150 50 25 0 1 2 3 4 INCHES

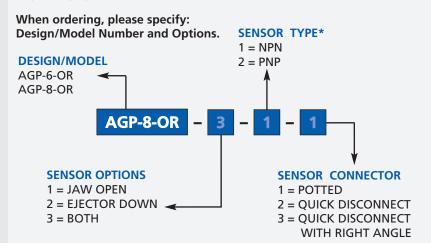
WARNING! Do not exceed tooling jaw length. See Chart above.

LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

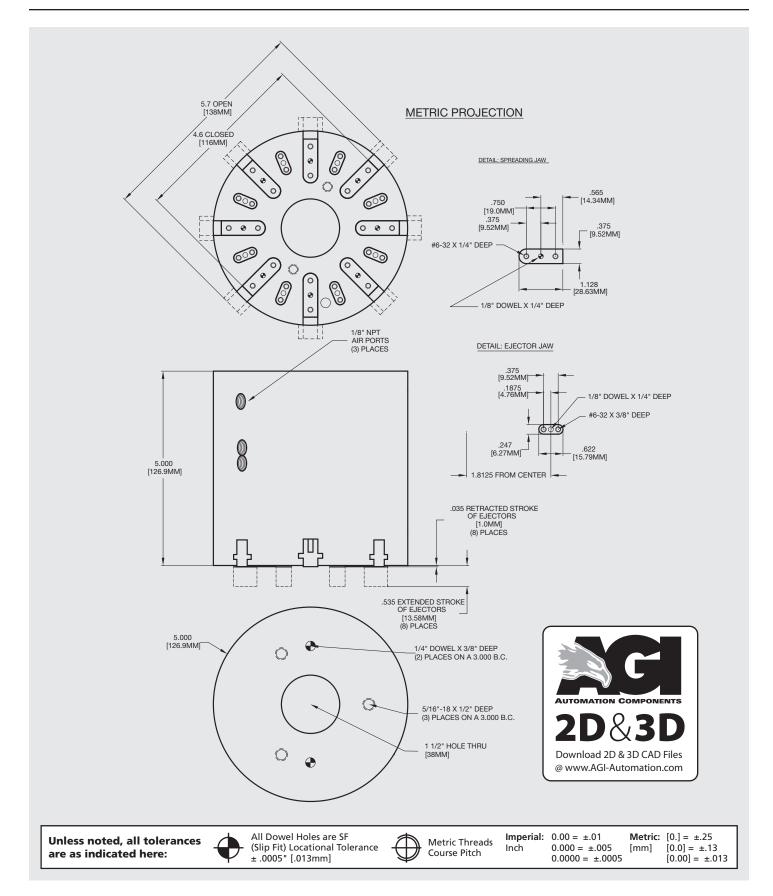


* NOTE: Proximity sensors are 4 mm dia., 12-30 VDC, 50 mA and comes with 2 meter cable.

Sensor Part # SNC06, SNQ06, SPC06, SPQ06



AGP-8-OR Parallel Gripper 8-Finger Gripper for Placing O-Rings, T-Slot Bearing Series





AGPM-1 Parallel GripperMiniature T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- High gripping force to weight ratio.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- AGPM-1 is fully field repairable for cost savings and minimum down time.
- Wedge is guided in the body for precise center repeatability.
- Shielded design for long service life.
- Top porting allows unit to be manifolded, eliminating air fittings.
- Purge port on side of unit to evacuate any contaminates from inside for a clean room environment.
- · Available in metric only.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

0.190 in	[4.8 mm]
PSI	[5.5 BAR]
9 lbs	[40 N]
9 lbs	[40 N]
	PSI 9 lbs

Time:

Close: 0.10 sec [0.10 sec] 0.10 sec Open: [0.10 sec]

Pressure Range:

10-100 PSI [.7-7 BAR] Low/High

Temperature Range:

Low/High -20°/180°F [-28°/80°C]

Side Play: ± 0.001 [.03 mm]

Static

Repeatability from center:

[.06 mm] +.002

Dynamic

Loading Capacity:

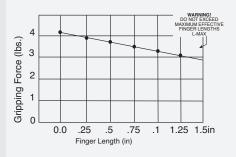
Max Tensile T	20 lbs	7 lbs
	[88 N]	[31 N]
Max Compressive C	20 lbs	7 lbs
	[88 N]	[31 N]
Max Moment M _x	12 in/lb	4 in/lb
χ	[1 Nm]	[.5 Nm]
Max Moment M _v	15 in/lb	5 in/lb
У	[2 Nm]	[.6 Nm]
Max Moment M ₇	12 in/lb	4 in/lb
-	[1 Nm]	[5 Nm]

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

Weight: 1.7 oz. [48.1 g] **Piston Diameter:** .437 in [11 mm]

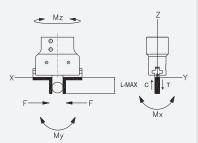
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HOLDING FORCES CHART



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

LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

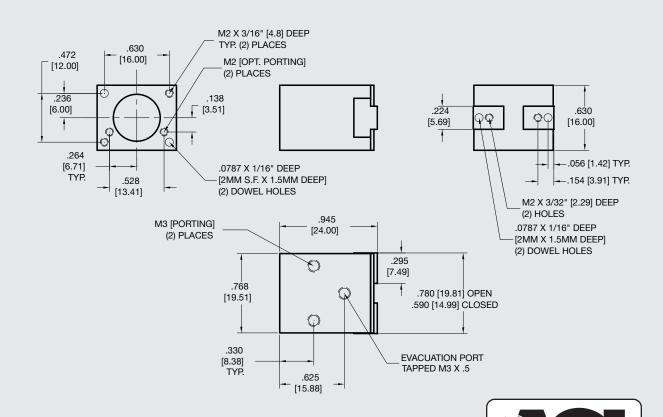
HOW TO ORDER

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





AGPM-1 Parallel Gripper Miniature T-Slot Bearing Series



Unless noted, all tolerances are as indicated here:



All Dowel Holes are SF (Slip Fit) Locational Tolerance ± .0005" [.013mm]



Metric Threads Course Pitch

Imperial: $0.00 = \pm .01$ $0.000 = \pm .005$ Inch $0.0000 = \pm .0005$

Metric: $[0.] = \pm .25$ [mm] $[0.0] = \pm .13$ $[0.00] = \pm .013$

Download 2D & 3D CAD Files @ www.AGI-Automation.com



AGLP-1 Parallel Gripper

T-Slot Bearing Series, Low Profile



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- Rugged rack and pinion synchronizing.
- High gripping force to weight ratio.
- Compact design with long stroke.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Hall effect sensors are available to monitor open and closed position of the jaws.
- AGLP is fully field repairable for cost savings and minimum down time

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 0.25 in [6.4 mm]

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 10 lbs [44 N] Opening: 10 lbs [44 N]

Time:

Close: 0.12 sec [0.12 sec] Open: 0.12 sec [0.12 sec]

Pressure Range:

Low/High 10-100 PSI [.7-7 BAR]

Temperature Range:

Low/High -20°/180°F [-28°/80°C]

Side Play: ± 0.001 [.03 mm]

Loading Capacity:

 Max Tensile T
 65 lbs [289 N]
 20 lbs [89 N]

 Max Compressive C
 65 lbs 20 lbs [289 N]
 20 lbs [89 N]

Max Moment M_X
60 in/lb 15 in/lb
[6.7 Nm] [1.6 Nm]
Max Moment M_y
60 in/lb 20 in/lb
[6.7 Nm] [2.2 Nm]
Max Moment M_z
60 in/lb 15 in/lb

[6.7 Nm] [1.6 Nm]

Material: High Strength, Hard Coated

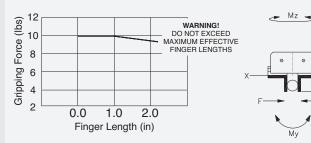
Weight: 2 oz [56 g] **Piston Diameter:** .625 in [15.8 mm]

aluminum bronze alloys, Steel

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HOLDING FORCES CHART

LOADING INFORMATION

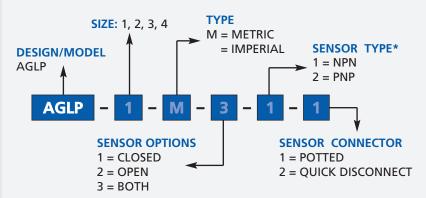


WARNING! Do not exceed tooling jaw length. See Chart above.

LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

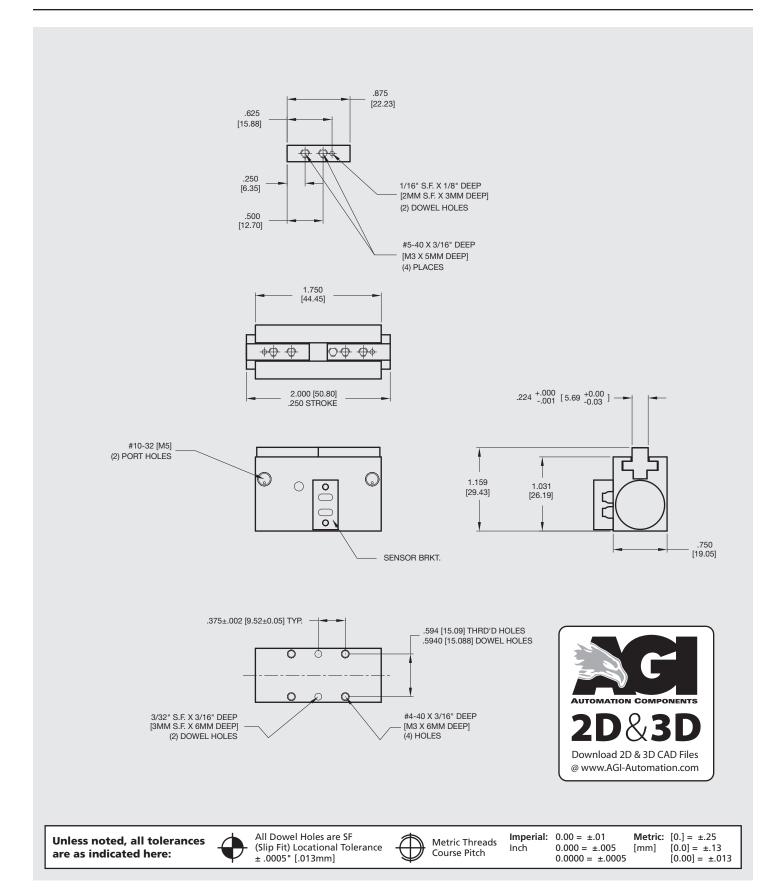


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable or quick disc.

Sensor Part # SHN01, SHNQ3, SHP01, SHPQ3



AGLP-1 Parallel Gripper T-Slot Bearing Series, Low Profile





AGLP-2 Parallel Gripper

T-Slot Bearing Series, Low Profile



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- Rugged rack and pinion synchronizing.
- High gripping force to weight ratio.
- Compact design with long stroke.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Hall effect sensors are available to monitor open and closed position of the jaws.
- AGLP is fully field repairable for cost savings and minimum down time

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 0.50 in [12.7 mm]

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 10 lbs [44 N] Opening: 10 lbs [44 N]

Time:

Close: 0.12 sec [0.12 sec] Open: 0.12 sec [0.12 sec]

Pressure Range:

Low/High 10-100 PSI [.7-7 BAR]

Temperature Range:

Low/High -20°/180°F [-28°/80°C]

Side Play: ± 0.001 [.03 mm]

Loading Capacity:

 Max Tensile T
 Static of 5 lbs of 1 lbs of 1

Max Moment M_X 60 in/lb 15 in/lb [6.7 Nm] [1.6 Nm] Max Moment M_y 60 in/lb 20 in/lb [6.7 Nm] [2.2 Nm] Max Moment M_z 60 in/lb 15 in/lb [6.7 Nm] [1.6 Nm]

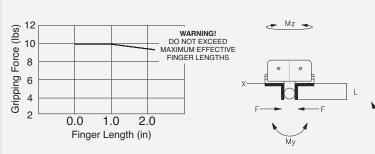
Material: High Strength, Hard Coated aluminum bronze alloys, Steel

Weight: 2 oz [56 g] **Piston Diameter:** .625 in [15.8 mm]

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HOLDING FORCES CHART

LOADING INFORMATION

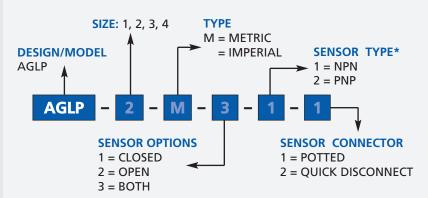


WARNING! Do not exceed tooling jaw length. See Chart above.

LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

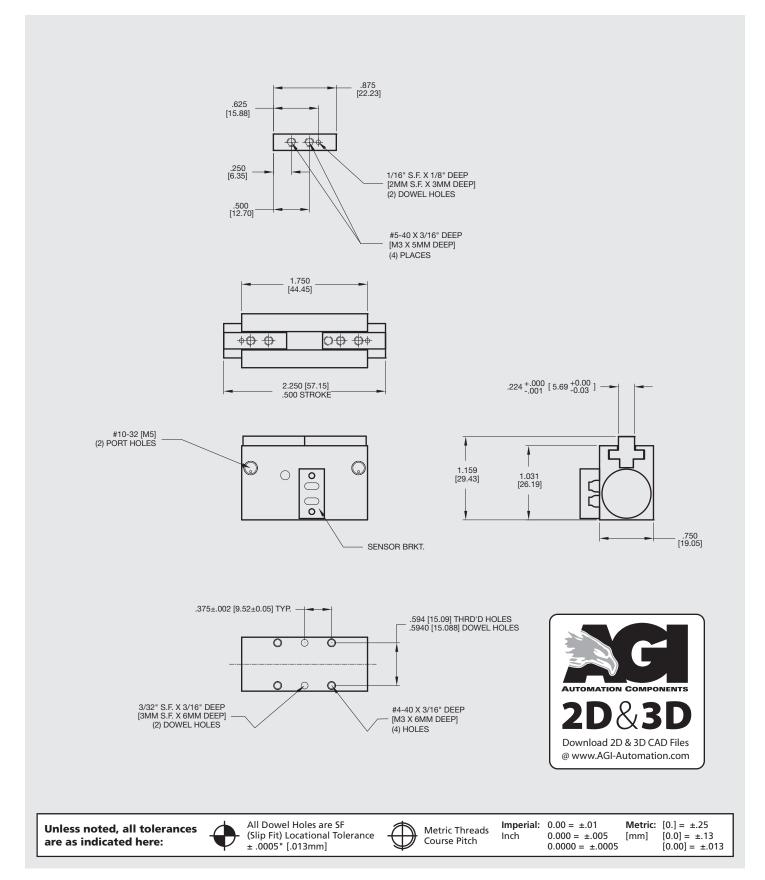


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable or quick disc.

Sensor Part # SHN01, SHNQ3, SHP01, SHPQ3



AGLP-2 Parallel Gripper T-Slot Bearing Series, Low Profile





AGLP-3 Parallel Gripper

T-Slot Bearing Series, Low Profile



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- Rugged rack and pinion synchronizing.
- High gripping force to weight ratio.
- Compact design with long stroke.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Hall effect sensors are available to monitor open and closed position of the jaws.
- AGLP is fully field repairable for cost savings and minimum down time.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 0.75 in [19 mm]

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 14 lbs [62 N] Opening: 14 lbs [62 N]

Time:

Close: 0.12 sec [0.12 sec] Open: 0.12 sec [0.12 sec]

Pressure Range:

Low/High 10-100 PSI [.7-7 BAR]

Temperature Range:

Low/High -20°/180°F [-28°/80°C]

Side Play: ± 0.001 [.03 mm]

Loading Capacity:

 Max Tensile T
 Static
 Dynamic

 120 lbs
 40 lbs

 [533 N]
 [177 N]

 Max Compressive C
 120 lbs
 40 lbs

 [533 N]
 [177 N]

 Max Moment Mx
 75 in/lb
 25 in/lb

 [8.5 Nm]
 [2.8 Nm]

 Max Moment My
 100 in/lb
 35 in/lb

 [11.3 Nm]
 [3.9 Nm]

 Max Moment Mz
 75 in/lb
 25 in/lb

 [8.5 Nm]
 [2.8 Nm]

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

Weight: 5 oz [142 g] **Piston Diameter:** 0.700 in [17.7 mm]

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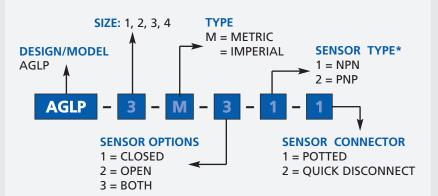
LOADING INFORMATION HOLDING FORCES CHART Mz 🚤 15 Gripping Force (lbs) Per Jaw 12 WARNING! DO NOT EXCEED MAXIMUM EFFECTIVE FINGER LENGTHS 9 6 3 0 2.0 0.0 1.0 3.0 Finger Length (in)

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

LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

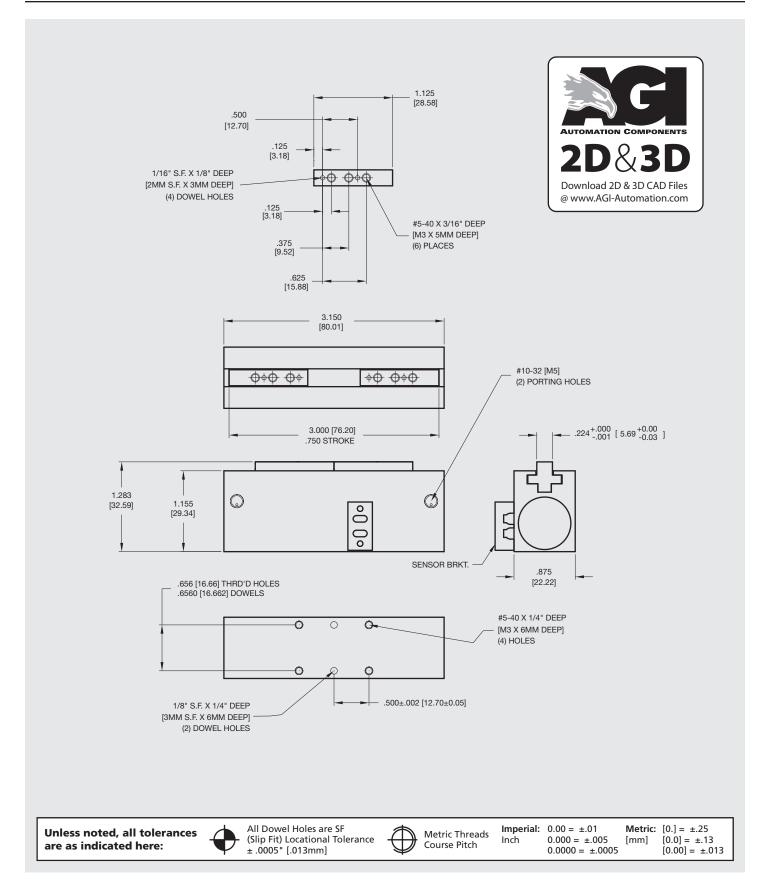


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable or quick disc.

Sensor Part # SHN01, SHNQ3, SHP01, SHPQ3



AGLP-3 Parallel Gripper T-Slot Bearing Series, Low Profile





AGLP-4 Parallel Gripper

T-Slot Bearing Series, Low Profile



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- Rugged rack and pinion synchronizing.
- High gripping force to weight ratio.
- Compact design with long stroke.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Hall effect sensors are available to monitor open and closed position of the jaws.
- AGLP is fully field repairable for cost savings and minimum down time

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 1.00 in [25.4 mm]

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 14 lbs [62 N] Opening: 14 lbs [62 N]

Time:

Close: 0.12 sec [0.12 sec]
Open: 0.12 sec [0.12 sec]

Pressure Range:

Low/High 10-120 PSI [.7-7 BAR]

Temperature Range:

Low/High -20°/180°F [-28°/80°C]

Side Play: ± 0.001 [.03 mm]

Loading Capacity:

 Max Tensile T
 Static
 Dynamic

 120 lbs
 40 lbs

 [533 N]
 [177 N]

 Max Compressive C
 120 lbs
 40 lbs

 [533 N]
 [177 N]

Max Moment M_X

75 in/lb 25 in/lb [8.5 Nm] [2.8 Nm]

Max Moment M_y

100 in/lb 35 in/lb [1.3 Nm] [3.9 Nm]

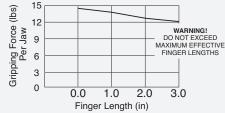
Max Moment **M_z** 75 in/lb 25 in/lb [8.5 Nm] [2.8 Nm]

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

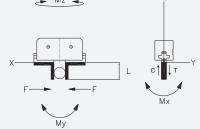
Weight: 5 oz [142 g] **Piston Diameter:** 0.700 in [17.7 mm]

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HOLDING FORCES CHART LOADING INFORMATION Z



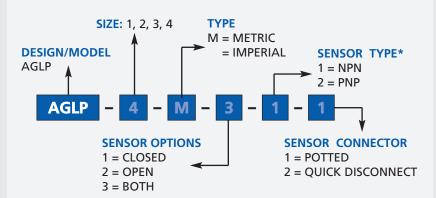
WARNING! Do not exceed tooling jaw length. See Chart above.



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

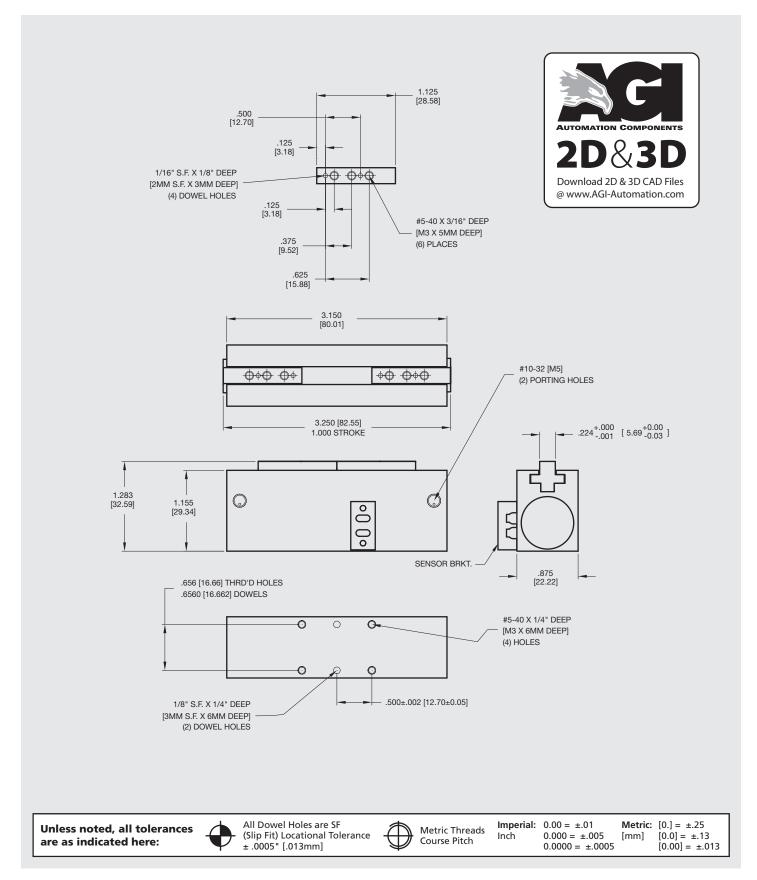


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable or quick disc.

Sensor Part # SHN01, SHNQ3, SHP01, SHPQ3



AGLP-4 Parallel Gripper T-Slot Bearing Series, Low Profile





AGP-187 Parallel Gripper

Double Guided Wedge



FEATURES AND BENEFITS

- · Jaws machined from S7 tool steel to prevent jaw breakage.
- Ultra high gripping force to weight ratio.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, this allowing for compliance with OSHA regulations.
- Additional side mounting holes and side air ports for optional mounting and porting available.
- Proximity switches are available to monitor open and closed position of the jaws.
- Fully field repairable for cost savings and minimum down time.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 0.16 in [4 mm]

Gripping Force @ 80 PSI [5.5 bar]:

Closing: 15 lbs [66 N] Opening: 16 lbs [71 N]

Time:

Close: 0.15 sec [0.15 sec]
Open: 0.15 sec [0.15 sec]
Pressure Range: 20-120 PSI [1.3-8 bar]
Temperature Range: -20°-180°F [-28°-80°C]

Side Play: ± 0.001 [0.03 mm]

Repeatability from center:

±.002 [0.06 mm]

Dvnamic

Loading Capacity:

Max Tensile T	50 lbs	7 lbs
	[222 N]	[31 N]
Max Compressive C	75 lbs	12 lbs
·	[333 N]	[53 N]

Static

 Max Moment Mx
 30 in/lb
 5 in/lb

 [3.4 Nm]
 [0.6 Nm]

 Max Moment My
 30 in/lb
 5 in/lb

 [3.4 Nm]
 [0.6 Nm]

 Max Moment Mz
 30 in/lb
 5 in/lb

 [3.4 Nm]
 5 in/lb

 [3.4 Nm]
 [0.6 Nm]

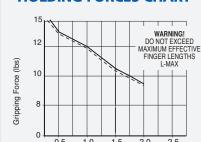
Material: High Strength, Hard

Coated aluminum bronze alloys, Steel

Weight: 3 oz. [85 g] **Piston Diameter:** 0.75 in [19 mm]

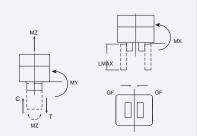
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HOLDING FORCES CHART



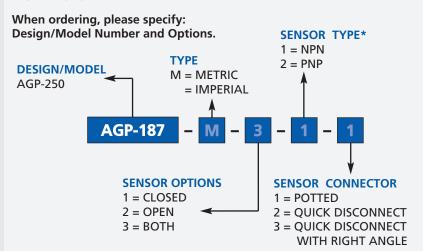
Finger Length (in)
WARNING! Do not exceed tooling jaw length.
See Chart above.

LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

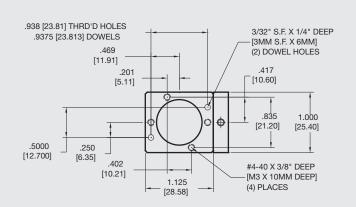


* NOTE: Proximity sensors are 4 mm dia., 12-30 VDC, 50 mA and comes with 2 meter cable or quick disc.

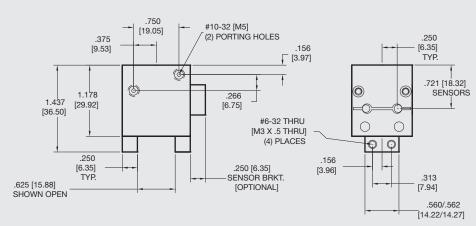
Sensor Part # SNC04, SNQ04, SPC04, SPQ04

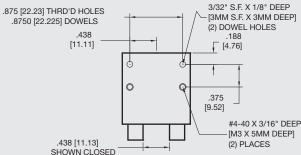


AGP-187 Parallel Gripper Double Guided Wedge









Unless noted, all tolerances are as indicated here:



All Dowel Holes are SF (Slip Fit) Locational Tolerance ± .0005" [.013mm]



Metric Threads Course Pitch

Imperial: $0.00 = \pm .01$ $0.000 = \pm .005$ Inch $0.0000 = \pm .0005$

Metric: $[0.] = \pm .25$ [mm] $[0.0] = \pm .13$ $[0.00] = \pm .013$



AGP-250 Parallel Gripper Double Guided Wedge



FEATURES AND BENEFITS

- · Jaws machined from S7 tool steel to prevent jaw breakage.
- Ultra high gripping force to weight ratio.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, this allowing for compliance with OSHA regulations.
- Additional side mounting holes and side air ports for optional mounting and porting available.
- Proximity switches are available to monitor open and closed position of the jaws.
- Fully field repairable for cost savings and minimum down time.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

0.25 in [6.3 mm] Stroke:

Gripping Force @ 80 PSI [5.5 bar]:

20 lbs [89 N] Closing: 22 lbs Opening: [97 N]

Time:

Close: 0.2 sec [0.2 sec] Open: 0.2 sec [0.2 sec] 30-120 PSI [2-8 bar] **Pressure Range:** Temperature Range: -20°-180°F [-28°-80°C]

Side Play: ± 0.001 [0.03 mm]

Static

100 lbs

Repeatability from center:

±.002 [0.06 mm]

Dynamic

15 lbs

Loading Capacity:

Max Tensile T

[444 N] 150 lbs [667 N]	[66.7 N] 25 lbs [111 N]
90 in/lb	15 in/lb
[10 Nm]	[1.7 Nm]
90 in/lb	15 in/lb
[10 Nm]	[1.7 Nm]
90 in/lb	15 in/lb
[10 Nm]	[1.7 Nm]
	150 lbs [667 N] 90 in/lb [10 Nm] 90 in/lb [10 Nm] 90 in/lb

Material: High Strength, Hard

Coated aluminum bronze alloys, Steel

Weight: 4 oz. [113 g]

Piston Diameter: 1.00 in [25.4 mm]

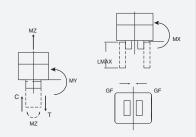
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HOLDING FORCES CHART

25 20 WARNING Gripping Force (lbs) DO NOT EXCEED MAXIMUM EFFECTIVE FINGER LENGTHS L-MAX 15 10 5 0 0.5 1.0 Finger Length (in)

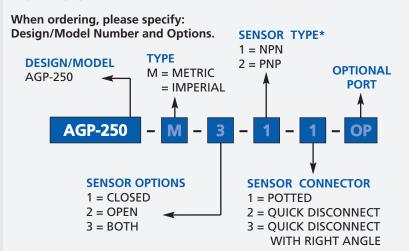
WARNING! Do not exceed tooling jaw length. See Chart above.

LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

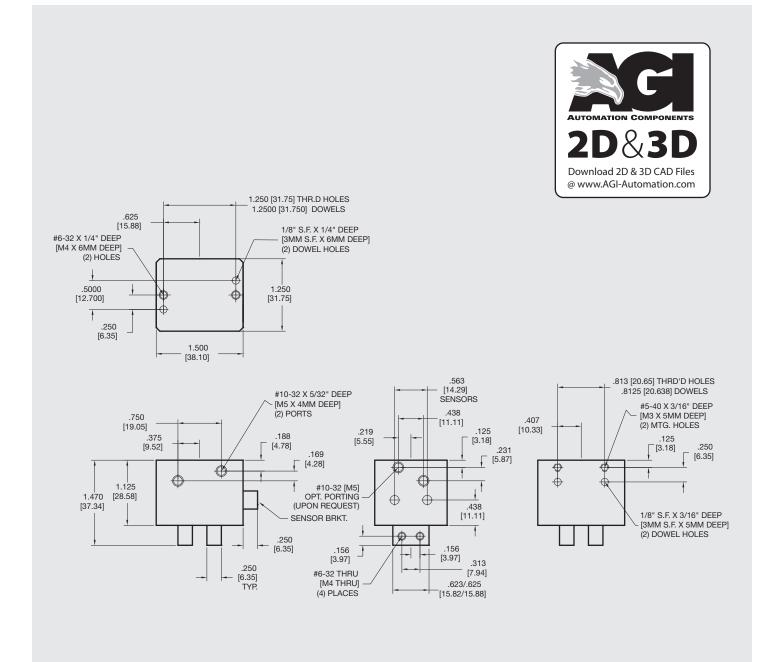


* NOTE: Proximity sensors are 4 mm dia., 12-30 VDC, 50 mA and comes with 2 meter cable or quick disc.

Sensor Part # SNC04, SNQ04, SPC04, SPQ04



AGP-250 Parallel Gripper Double Guided Wedge



Unless noted, all tolerances are as indicated here:



All Dowel Holes are SF (Slip Fit) Locational Tolerance ± .0005" [.013mm]



Metric Threads Course Pitch

Imperial: $0.00 = \pm .01$ $0.000 = \pm .005$ Inch $0.0000 = \pm .0005$

Metric: $[0.] = \pm .25$ [mm] $[0.0] = \pm .13$ $[0.00] = \pm .013$



AGP-375 Parallel Gripper

Double Guided Wedge



FEATURES AND BENEFITS

- Ultra high gripping force to weight ratio.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, this allowing for compliance with OSHA regulations.
- Additional side mounting holes and side air ports for optional mounting and porting available.
- Proximity switches are available to monitor open and closed position of the jaws.
- Fully field repairable for cost savings and minimum down time.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Jaws

Stroke: 0.375 in [9.5 mm]

Gripping Force @ 80 PSI [5.5 bar]:

Closing: 20 lbs [89 N] Opening: 22 lbs [97 N]

Time:

 Close:
 0.2 sec
 [0.2 sec]

 Open:
 0.2 sec
 [0.2 sec]

 Pressure Range:
 30-120 PSI [2-8 bar]

 Temperature Range:
 -20°-180°F [-28°-80°C]

Side Play: ± 0.001 [0.03 mm]

Repeatability from center:

±.002 [0.06 mm]

Loading Capacity:

	Jianic	Dynamic
Max Tensile T	200 lbs	25 lbs
	[889 N]	[111 N]
Max Compressive C	400 lbs	25 lbs
•	[1780 N]	[111 N]

Static

 Max Moment Mx
 150 in/lb [2.8 Nm]

 [17 Nm]
 [2.8 Nm]

 Max Moment My
 150 in/lb [2.8 Nm]

 Max Moment Mz
 150 in/lb [2.8 Nm]

 Max Moment Mz
 150 in/lb [2.8 Nm]

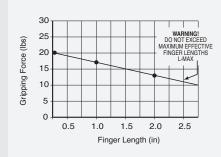
Material: High Strength, Hard

Coated aluminum bronze alloys, Steel

Weight: 7 oz. [198 g] **Piston Diameter:** 1.00 in [25.4 mm]

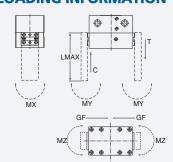
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HOLDING FORCES CHART



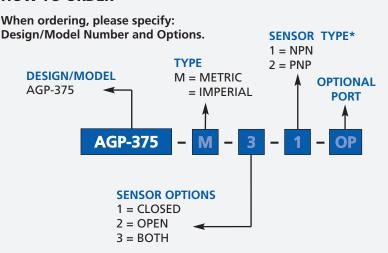
WARNING! Do not exceed tooling jaw length. See Chart above.

LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

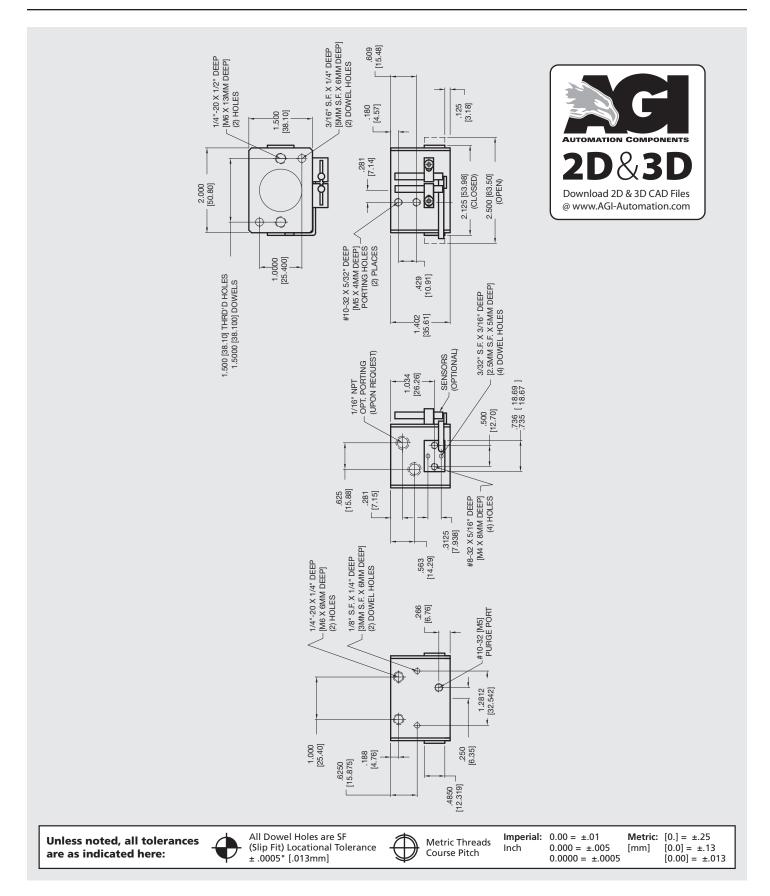


* NOTE: Proximity sensors are 4 mm dia., 12-30 VDC, 50 mA and comes with 2 meter cable or quick disc.

Sensor Part # SNC04, SPC04



AGP-375 Parallel Gripper Double Guided Wedge





AGP-500 Parallel Gripper

Double Guided Wedge



FEATURES AND BENEFITS

- Ultra high gripping force to weight ratio.
- True parallel jaw motion for easy tooling.
- Totally sealed unit with air purge:
 - (i) can be slightly pressurized to prevent debris or coolant from entering.
 - (ii) a vacuum can be applied to evacuate any contaminants from inside the unit in a clean room environment.
- Units are permanently lubricated for non-lube air operation, this allowing for compliance with OSHA regulations.
 - Additional side mounting holes & air ports for optional mounting/porting are available.
- Proximity switches are available to monitor open/closed position of the jaws.
- Fully field repairable for cost savings and minimum down time.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

0.50 in [12.7 mm] Stroke:

Gripping Force @ 80 PSI [5.5 bar]:

37 lbs [164 N] Closing: Opening: 40 lbs [178 N]

Time:

Close: 0.2 sec [0.2 sec] Open: 0.2 sec [0.2 sec] 30-120 PSI [2-8 bar] **Pressure Range:** Temperature Range: -20°-180°F [-28°-80°C]

Side Play: ± 0.001 [0.03 mm]

Repeatability from center:

±.002 [0.06 mm]

Loading Capacity:

	Static	Dynamic
Max Tensile T	400 lbs	50 lbs
	[1780 N]	[222 N]
Max Compressive C	750 lbs	50 lbs
·	[3336 N]	[222 N]

Static

Max Moment Mx 300 in/lb 50 in/lb [34 Nm] [5.6 Nm] Max Moment My 300 in/lb 50 in/lb [34 Nm] [5.6 Nm] Max Moment Mz 300 in/lb 50 in/lb

Material: High Strength, Hard

[34 Nm]

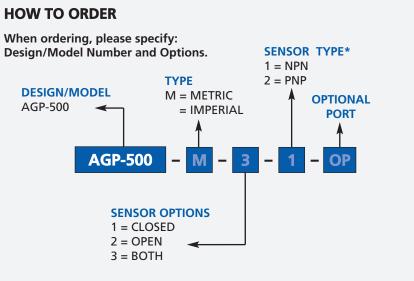
Coated aluminum bronze alloys, Steel

[5.6 Nm]

Weight: 11 07. [311 g] **Piston Diameter:** 1.25 in [31.75 mm]

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HOLDING FORCES CHART LOADING INFORMATION 40 Gripping Force (lbs) 35 30 25 20 15 10 GE 5 0 0.5 1.0 1.5 Finger Length (in) WARNING! Do not exceed tooling jaw length. **LOOK!** More Technical specifications for sensors on "Sensors Accessories" page. See Chart above.

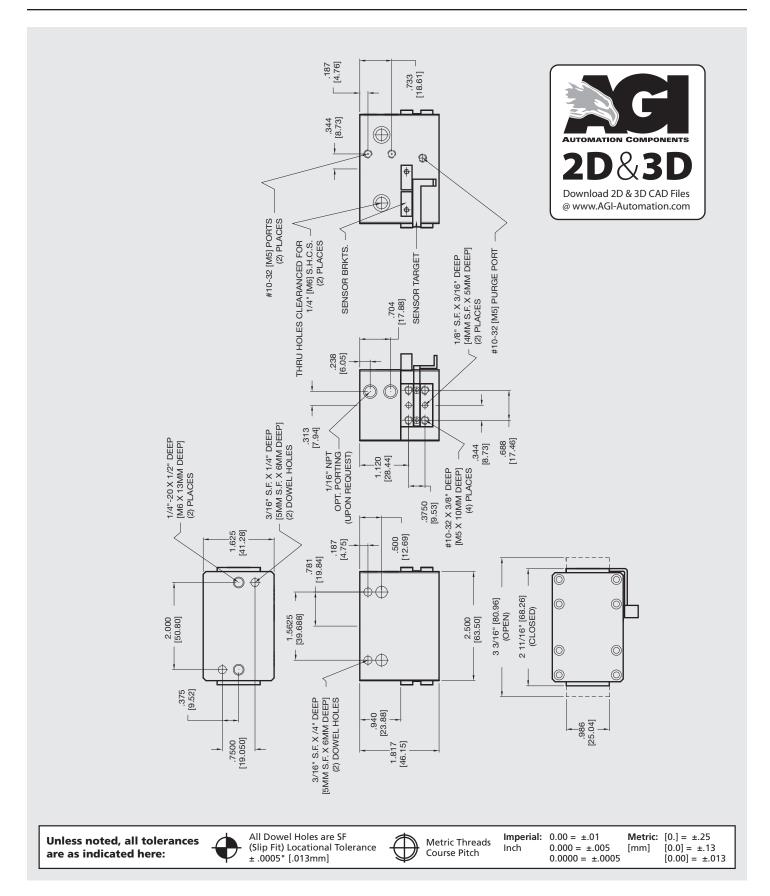


* NOTE: Proximity sensors are 4 mm dia., 12-30 VDC, 50 mA and comes with 2 meter cable or quick disc.

Sensor Part # SNC04, SPC04



AGP-500 Parallel Gripper Double Guided Wedge





AGPT-500 Parallel Gripper

T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- High gripping force to weight ratio.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Proximity switches are available to monitor open and closed position of the jaws.
- AGPT is fully field repairable for cost savings and minimum down time.
- Linkage is guided in the body for precise center repeatability.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 0.50 in [12.7 mm] Gripping Force Per Jaw @ 80 PSI [5.5 BAR] Closing: 10 PSI [44 N] 12 PSI Opening: [53 N]

Time:

Close: 0.12 sec [0.12 sec]Open: 0.12 sec [0.12 sec]

Pressure Range:

10-120 PSI [.7-8 BAR] Low/High

Temperature Range:

-20°/180°F [-28°/80°C] Low/High

Side Play: ± 0.001 [.03 mm]

Repeatability

 ± 0.002 [.06 mm] from Center:

Loading Capacity:

Static **Dynamic** Max Tensile T 50 lbs 15 lbs [66.7 N] [222 N] Max Compressive C 50 lbs 15 lbs [222 N] [66.7 N]

> 50 in/lb 12 in/lb

Max Moment Mx [5.6 Nm] [1.3 Nm]

Max Moment Mv 60 in/lb 15 in/lb [6.7 Nm] [1.7 Nm]

50 in/lb 12 in/lb Max Moment M₇ [5.6 Nm] [1.3 Nm]

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

Weight: 5 oz [142 q] **Piston Diameter:** 0.625 in [15.8 mm]

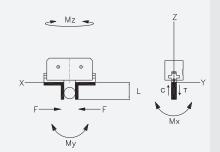
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HOLDING FORCES CHART

15 12 **Gripping Force** 9 6 3 Λ 1.0 2.0 Finger Length (in)

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

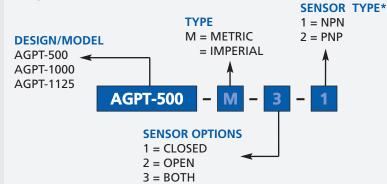
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

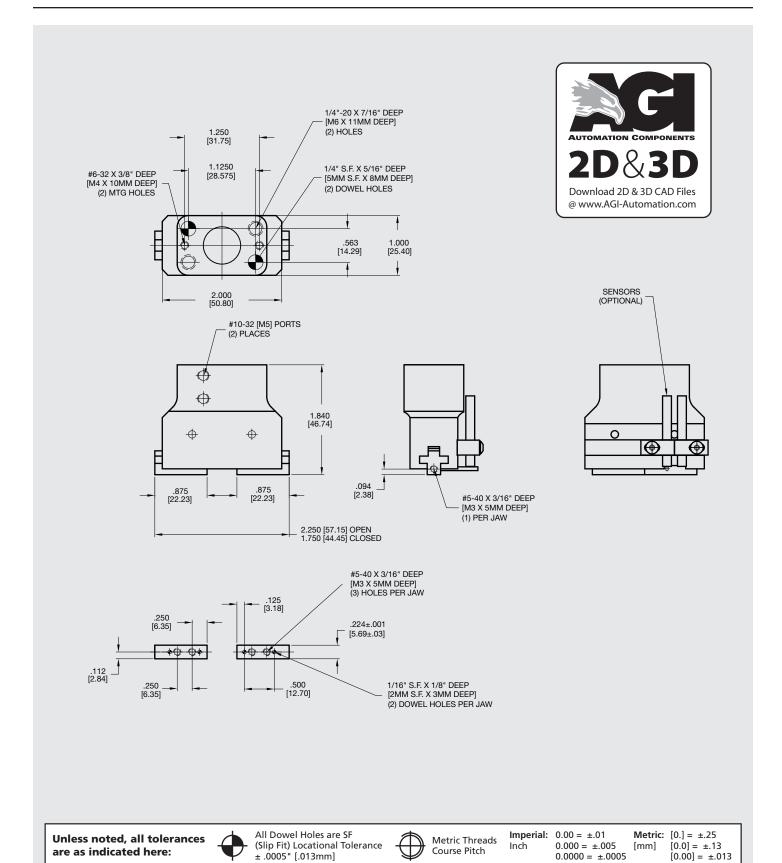


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter

Sensor Part # SNC04, SPC04



AGPT-500 Parallel Gripper T-Slot Bearing Series





AGPT-1000 Parallel Gripper

T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- High gripping force to weight ratio.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Proximity switches are available to monitor open and closed position of the jaws.
- AGPT is fully field repairable for cost savings and minimum down time.
- Linkage is guided in the body for precise center repeatability.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Jaws

Stroke: 1.0 in [25.4 mm]

Gripping Force Per Jaw @ 80 PSI [5.5 BAR]

Closing: 15 PSI [67 N] Opening: 17 PSI [75 N]

Time:

Close: 0.20 sec [0.20 sec]
Open: 0.20 sec [0.20 sec]

Pressure Range:

Low/High 10-120 PSI [.7-8 BAR]

Temperature Range:

Low/High -20°/180°F [-28°/80°C]

Side Play: ± 0.001 [.03 mm]

Repeatability

from Center: ± 0.001 [.03 mm]

Loading Capacity:

Max Moment M₂

Static **Dynamic** Max Tensile T 60 lbs 20 lbs [88.9 N] [266 N] Max Compressive C 60 lbs 20 lbs [266 N] [88.9 N] 100 in/lb 25 in/lb Max Moment My [11.3 Nm] [2.8 Nm] Max Moment M_V 120 in/lb 30 in/lb [13.5 Nm] [3.4Nm]

Material: High Strength, Hard Coated

100 in/lb 25 in/lb

[11.3 Nm] [2.8 Nm]

Weight: 8 oz [226 g] **Piston Diameter:** 0.75 in [19 mm]

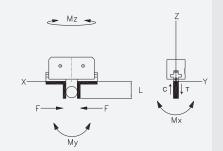
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aluminum bronze alloys, Steel

HOLDING FORCES CHART

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

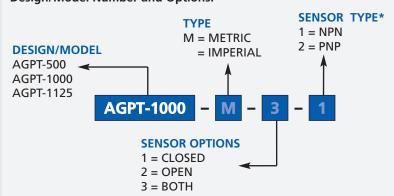
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

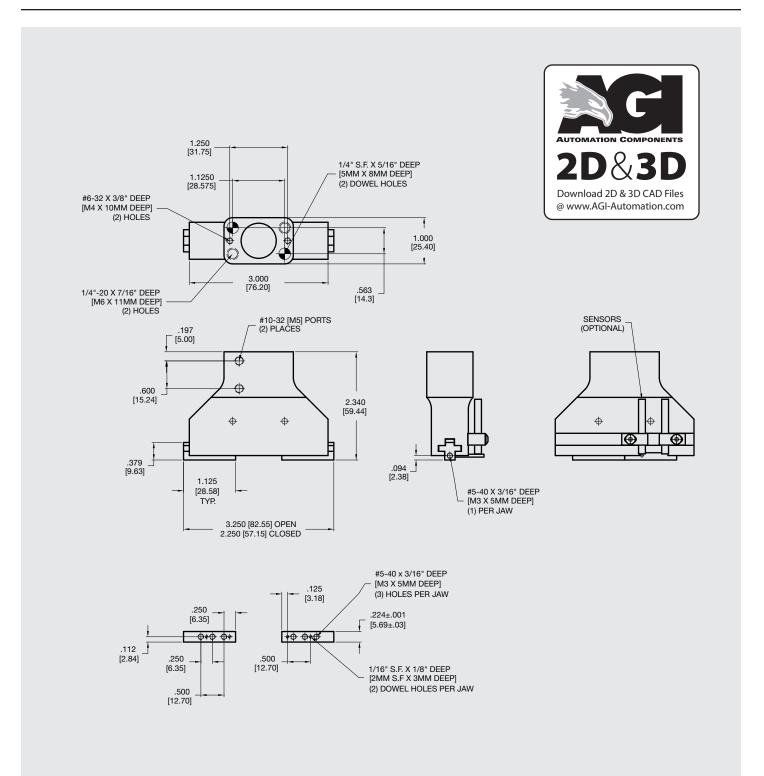


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNC04, SPC04



AGPT-1000 Parallel Gripper T-Slot Bearing Series



Unless noted, all tolerances are as indicated here:





Imperial: $0.00 = \pm .01$ $0.000 = \pm .005$ Inch $0.0000 = \pm .0005$

Metric: $[0.] = \pm .25$ [mm] $[0.0] = \pm .13$ $[0.00] = \pm .013$



AGPT-1125 Parallel Gripper

T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- High gripping force to weight ratio.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Proximity switches are available to monitor open and closed position of the jaws.
- AGPT is fully field repairable for cost savings and minimum down time.
- Linkage is guided in the body for precise center repeatability.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 1.125 in [28.6 mm]

Gripping Force Per Jaw @ 80 PSI [5.5 BAR]

Closing: 30 PSI [133 N] Opening: 27 PSI [120 N]

Time:

Close: 0.20 sec [0.20 sec]
Open: 0.20 sec [0.20 sec]

Pressure Range:

Low/High 10-120 PSI [.7-8 BAR]

Temperature Range:

Low/High -20°/180°F [-28°/80°C]

Side Play: ± 0.001 [.03 mm]

Repeatability

from Center: ± 0.001 [.03 mm]

Loading Capacity:

 Max Tensile T
 Static
 Dynamic

 100 lbs
 30 lbs

 [444 N]
 [133 N]

 Max Compressive C
 100 lbs
 30 lbs

Max Compressive C 100 lbs 30 lbs [444 N] [133 N]

Max Moment M_X 200 in/lb 25 in/lb

[22.6 Nm] [5.6 Nm] Max Moment **My** 250 in/lb 30 in/lb [28 Nm] [6.7Nm]

Max Moment M_z 200 in/lb 25 in/lb [22.6 Nm] [5.6 Nm]

Material: High Strength, Hard Coated

aluminum bronze alloys, Steel

 Weight:
 1 lb. [.5 kg]

 Piston Diameter:
 1.00 in [25.4 mm]

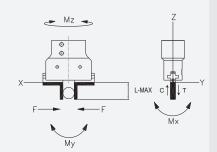
January 2009 - PATENTED Made in the USA

HOLDING FORCES CHART

27 WARNING: DO NOT EXCEPT IN MANUAL EFFECTIVE FINGER LENGTHS DE 25 MAXIMUM EFFECTIVE FINGER LENGTHS 0 0.0 1.0 2.0 3.0 Finger Length (in)

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

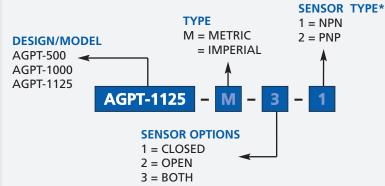
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

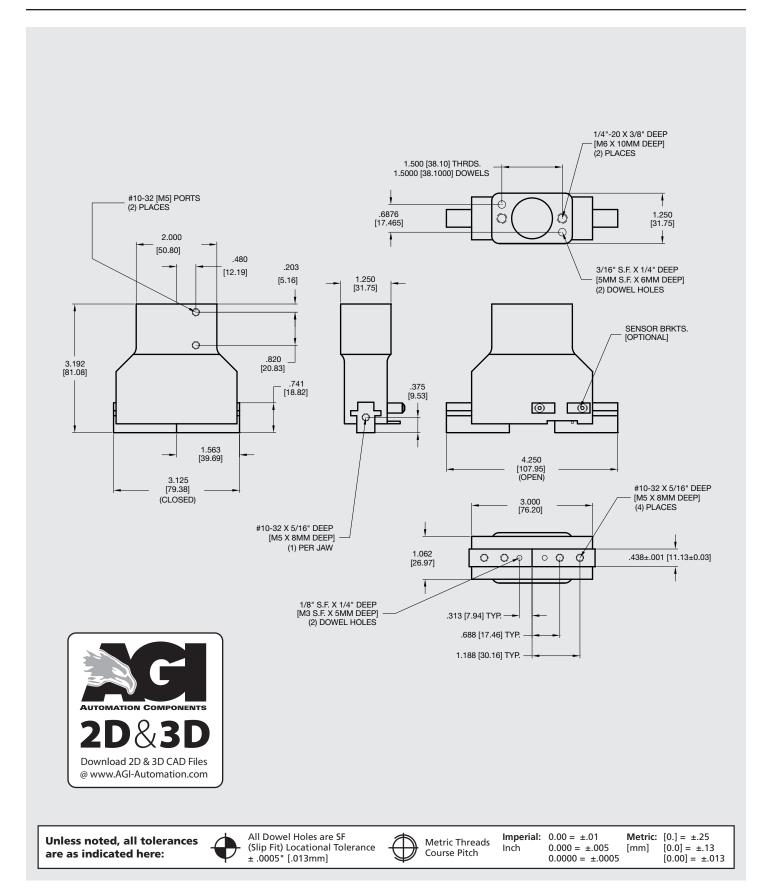


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNC04, SPC04



AGPT-1125 Parallel Gripper T-Slot Bearing Series





AGW-250 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

.75 in [19 mm] Stroke:

Thrust Force @ 80 PSI [5.5 BAR]

Closing: 20 lbs [89 N] Opening: 26 lbs [115 N]

Time:

Close: 0.2 sec [0.2 sec]Open: 0.2 sec [0.2 sec]

Pressure Range:

Low/High 20-120 PSI [1.7-8 BAR]

Temperature Range:

-20°/180°F [-28°/80°C] Low/High

Side Play: ± 0.001 [.03 mm]

Repeatability

from Center: ± 0.002 [.06 mm]

Loading Capacity:

Static **Dynamic** Max Tensile T 50 lbs 10 lbs [230 N] [44.5 N] Max Compressive C 50 lbs 10 lbs [44.5 N] [230 N]

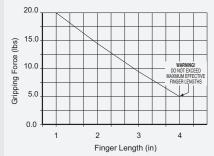
Max Moment M_x 100 in/lb 20 in/lb [11.3 Nm] [2.3 Nm] Max Moment M_V 150 in/lb 30 in/lb [17 Nm] [3.4Nm] Max Moment M₇ 100 in/lb 20 in/lb [11.3 Nm] [2.3 Nm]

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

Weight: 11 oz [311 g] **Piston Diameter:** .500 in x 4 [12.7 mm]

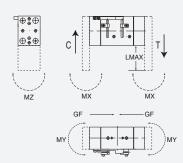
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HOLDING FORCES CHART



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

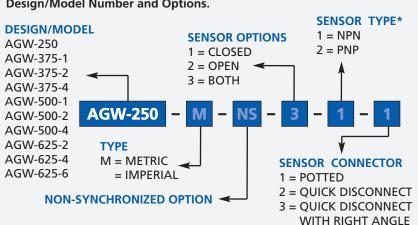
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

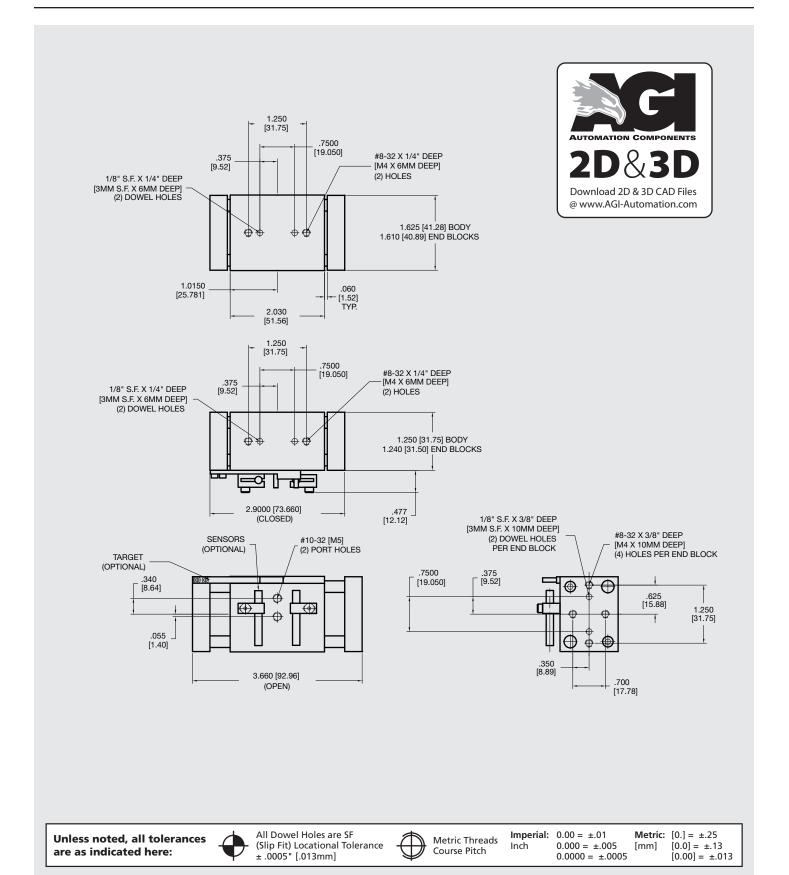


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter

Sensor Part # SNQ04, SNC04, SPC04, SPQ04



AGW-250 Parallel Gripper Wide-Body, Synchronous/Non-Synchronous





AGW-375-1 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 1 in [25.4 mm]

Gripping Force @ 80 PSI Per Jaw [5.5 BAR] Closing: 36 lbs [160 N]

Opening: 36 lbs [160 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:

 Max Tensile T
 Static 100 lbs 20 lbs [445 N] [89 N]

 Max Compressive C
 100 lbs 20 lbs [445 N] [89 N]

 Max Moment Mx
 175 in/lb [89 N]

 Max Moment Mx
 175 in/lb [18.7 Nm] [4 Nm]

 Max Moment Mx
 175 in/lb [18.7 Nm] [4 Nm]

Max Moment My 250 in/lb 50 in/lb [28 Nm] [5.6Nm] Max Moment Mz 175 in/lb 35 in/lb [19.7 Nm] [4 Nm]

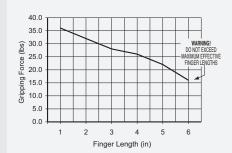
Material: High Strength, Hard Coated aluminum bronze alloys, Steel

 Weight:
 1.3 lbs [6 kg]

 Piston Diameter:
 .625 in x 4 [15.8 mm]

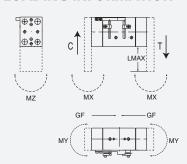
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HOLDING FORCES CHART



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

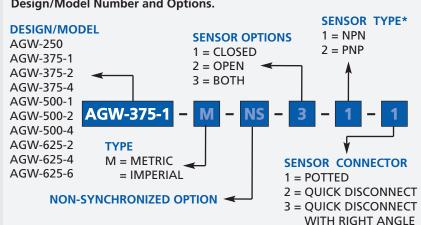
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

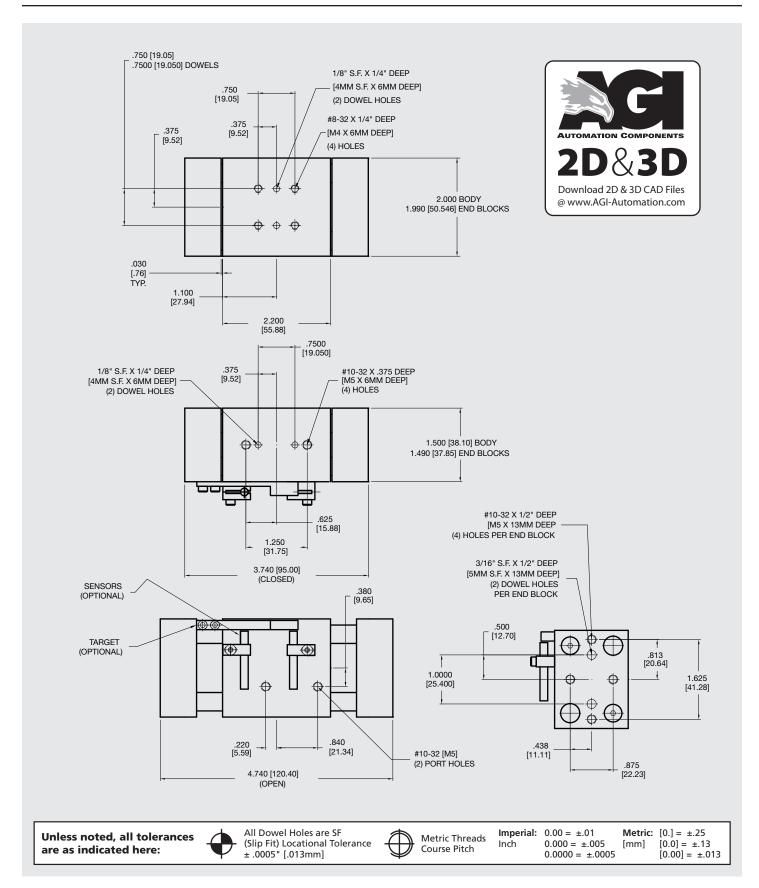


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter

Sensor Part # SNQ04, SNC04, SPC04, SPQ04



AGW-375-1 Parallel Gripper Wide-Body, Synchronous/Non-Synchronous





AGW-375-2 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 2 in [50.8 mm]

Gripping Force @ 80 PSI Per Jaw [5.5 BAR] Closing: 36 lbs [160 N]

Closing: 36 lbs [160 N]
Opening: 38 lbs [170 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:

Max Moment M₇

Static **Dynamic** Max Tensile T 100 lbs 20 lbs [445 N] [89 N] 100 lbs 20 lbs Max Compressive C [89 N] [445 N] 175 in/lb 35 in/lb Max Moment M_x [19.5 Nm] [4 Nm] Max Moment My 250 in/lb 50 in/lb [28 Nm] [5.6Nm]

[19.5 Nm] [4 Nm] Material: High Strength, Hard Coated

175 in/lb

aluminum bronze alloys, Steel

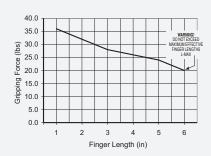
35 in/lb

 Weight:
 2 lbs [9 kg]

 Piston Diameter:
 .625 in x 4 [15.8 mm]

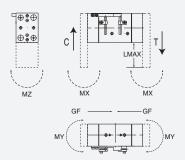
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HOLDING FORCES CHART



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

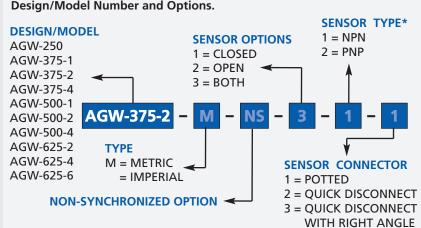
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

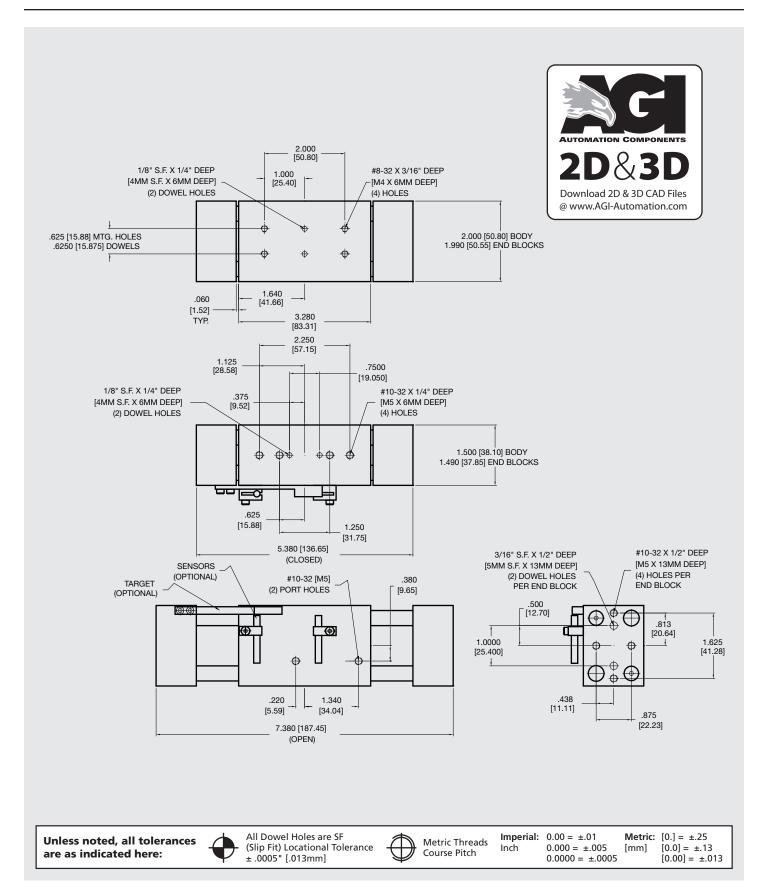


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter

Sensor Part # SNQ04, SNC04, SPC04, SPQ04



AGW-375-2 Parallel Gripper Wide-Body, Synchronous/Non-Synchronous





AGW-375-4 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: 4 in [101.6 mm]

Gripping Force @ 80 PSI Per Jaw [5.5 BAR]

Closing: 36 lbs [160 N] Opening: 38 lbs [170 N]

Time:

Close: 0.6 sec [0.6 sec] Open: 0.6 sec [0.6 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:

 Max Tensile T
 Static 100 lbs 20 lbs [445 N] [89 N]

 Max Compressive C
 100 lbs 20 lbs [49 N]

 Max Moment Mx
 175 in/lb 35 in/lb [19.5 Nm] [4 Nm]

 Max Moment M 250 in/lb 50 in/lb
 20 in/lb 50 in/lb

Max Moment My 250 in/lb 50 in/lb [28 Nm] [5.6Nm] Max Moment Mz 175 in/lb 35 in/lb [19.5 Nm] [4 Nm]

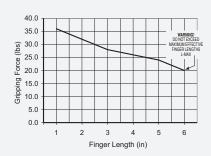
Material: High Strength, Hard Coated aluminum bronze alloys, Steel

 Weight:
 3.2 lbs [1.5 kg]

 Piston Diameter:
 .625 in x 4 [15.8 mm]

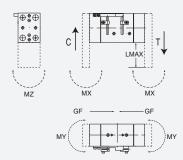
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HOLDING FORCES CHART



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

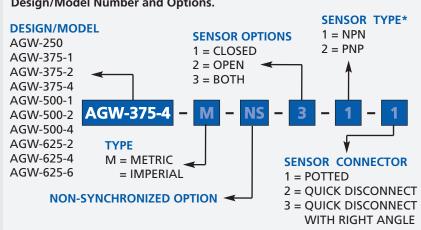
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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



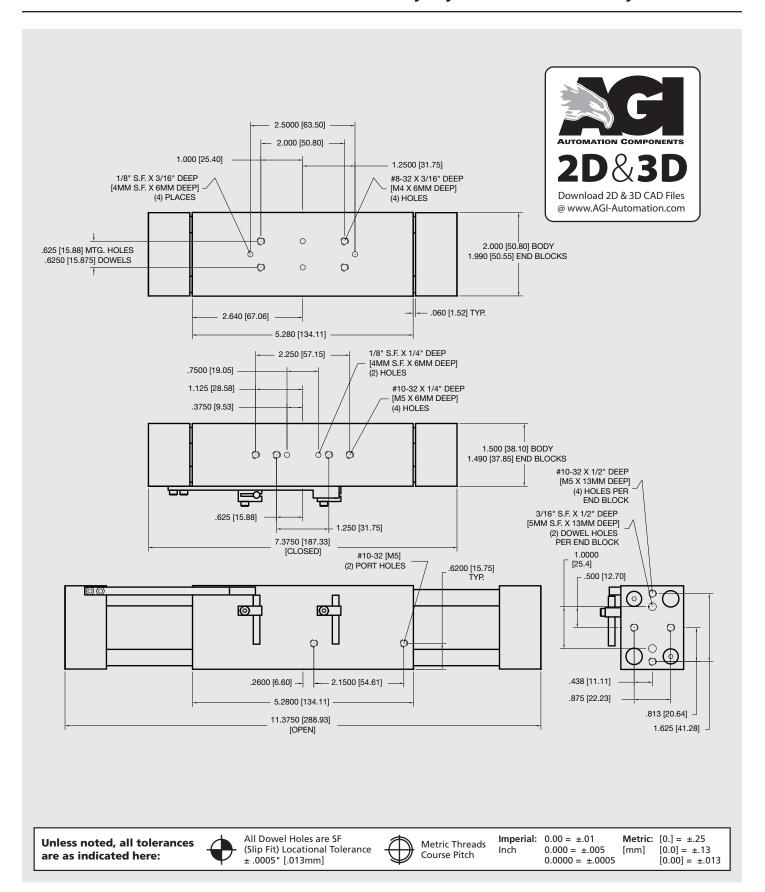
* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC04, SPC04, SPQ04



AGW-375-4 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous





AGW-500-1 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.

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]

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:

 Max Tensile T
 Static
 Dynamic

 500 lbs
 50 lbs

 [2220 N]
 [222 N]

 Max Compressive C
 500 lbs
 50 lbs

 [2220 N]
 [222 N]

Max Moment M_X 500 in/lb 50 in/lb [56.5 Nm] [5.6 Nm] Max Moment M_y 750 in/lb 75 in/lb [85 Nm] [8.5Nm] Max Moment M_z 500 in/lb 50 in/lb

[56.5 Nm] [5.6 Nm]

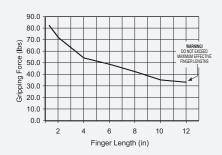
Material: High Strength, Hard Coated aluminum bronze alloys, Steel

 Weight:
 3 lbs
 [1.4 kg]

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

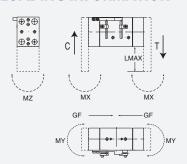
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HOLDING FORCES CHART



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

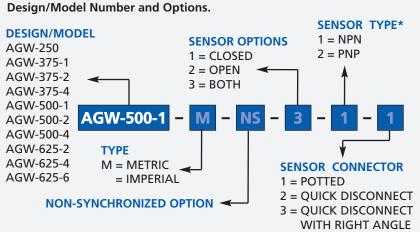
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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



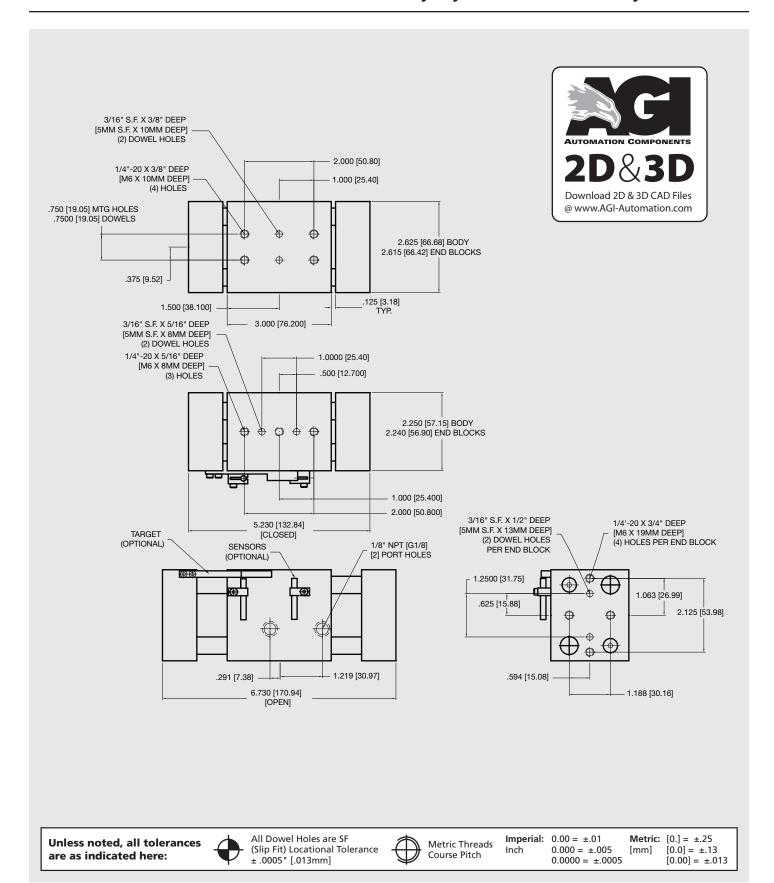
* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC04, SPC04, SPQ04

info@AGI-Automation.com • www.AGI-Automation.com



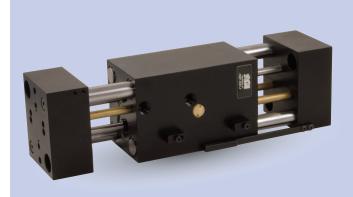
AGW-500-1 Parallel Gripper Wide-Body, Synchronous/Non-Synchronous





AGW-500-2 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Jaws

Stroke: 2.5 in [63.5 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 Dynamic Max Tensile T 500 lbs 50 lbs [2220 N] [222 N] Max Compressive C 500 lbs 50 lbs [2220 N] [222 N] 500 in/lb Max Moment M_x 50 in/lb [56.5 Nm] [5.6 Nm] Max Moment M_V 750 in/lb 75 in/lb [85 Nm] [8.5Nm] 500 in/lb 50 in/lb Max Moment M₇ [56.5 Nm] [5.6 Nm]

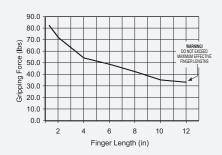
Material: High Strength, Hard Coated aluminum bronze alloys, Steel

Weight: 4 lbs [1.8 kg]

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

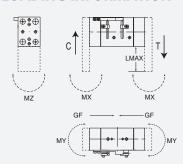
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HOLDING FORCES CHART



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

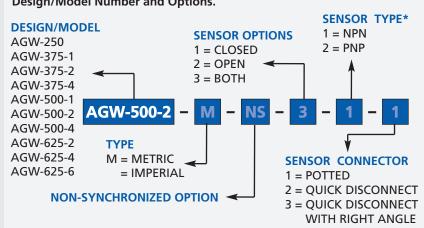
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

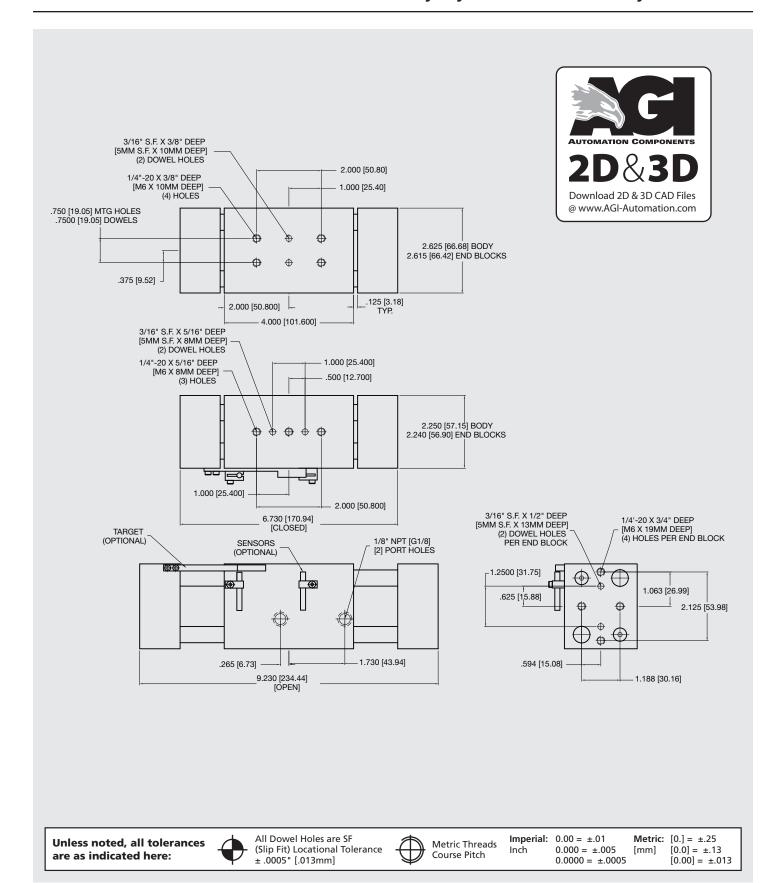


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC04, SPC04, SPQ04



AGW-500-2 Parallel Gripper Wide-Body, Synchronous/Non-Synchronous





AGW-500-4 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Jaws

Stroke: 4 in [101.6 mm]

Gripping Force @ 80 PSI Per Jaw [5.5 BAR]

Closing: 84 lbs [373 N]
Opening: 86 lbs [383 N]

Time:

Close: 0.5 sec [0.5 sec] Open: 0.5 sec [0.5 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]

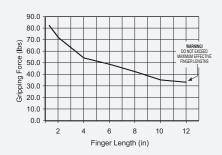
Loading Capacity:

Dynamic Static Max Tensile T 500 lbs 50 lbs [2220 N] [222 N] Max Compressive C 500 lbs 50 lbs [2220 N] [222 N] 500 in/lb Max Moment M_x 50 in/lb [56.5 Nm] [5.6 Nm] Max Moment M_V 750 in/lb 75 in/lb [85 Nm] [8.5Nm] 500 in/lb 50 in/lb Max Moment M₇ [56.5 Nm] [5.6 Nm]

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

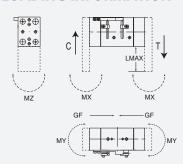
Weight: 6 lbs [2.7 kg]
Piston Diameter: .875 in x 4 [22.3 mm]
January 2009 - PATENTED Made in the USA

HOLDING FORCES CHART



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

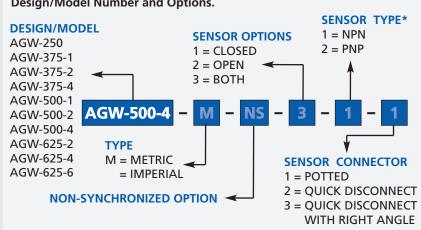
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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



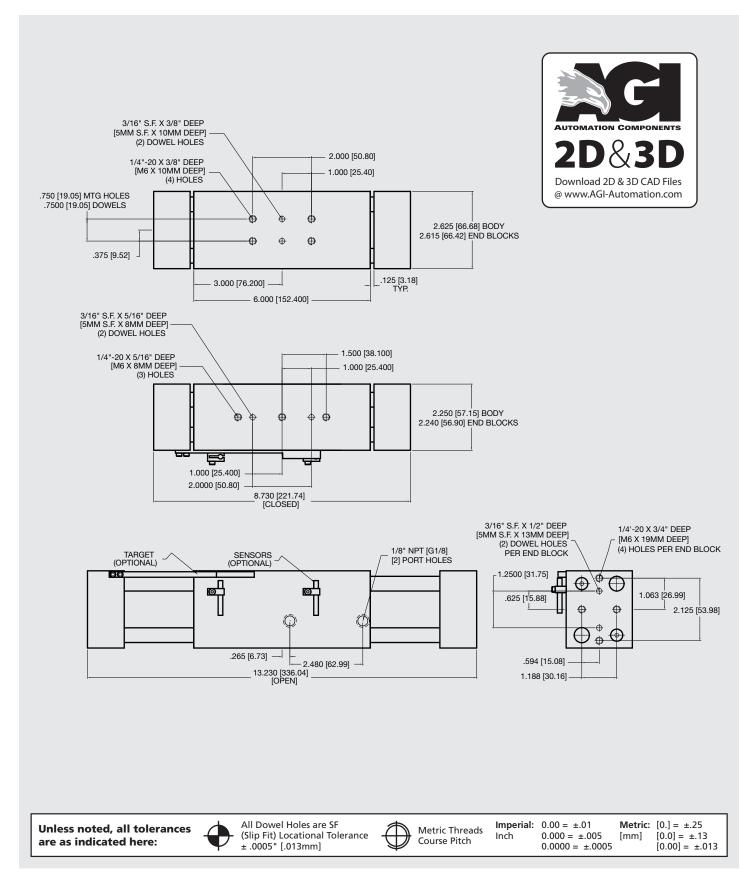
* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC04, SPC04, SPQ04



AGW-500-4 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous





AGW-625-2 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.
- Pistons seals are quad ring type for long service life.
- 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.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Jaws

Stroke: 2 in [50.8 mm]

Gripping Force @ 80 PSI Per Jaw [5.5 BAR]

Closing: 130 lbs [578 N] Opening: 132 lbs [587 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]

Static

Dynamic

Loading Capacity:

 Max Tensile T
 1300 lbs
 150 lbs

 [5700 N]
 [667 N]

 Max Compressive C
 1300 lbs
 150 lbs

 [5700 N]
 [667 N]

 Max Moment Mx
 1100 in/lb
 120 in/lb

 Max Moment My
 1500 in/lb
 130 in/lb

Max Moment M_y 1500 in/lb 130 in/lb [170 Nm] [14.7Nm]
Max Moment M_z 1100 in/lb 120 in/lb [124 Nm] [13.5 Nm]

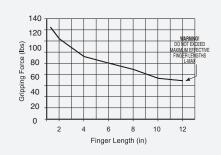
Material: High Strength, Hard Coated aluminum bronze alloys, Steel

Weight: 6.3 lbs [2.9 kg]

Piston Diameter: 1.625 in [41.3 mm]

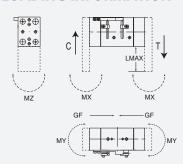
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HOLDING FORCES CHART



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

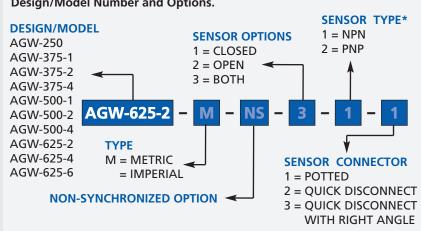
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

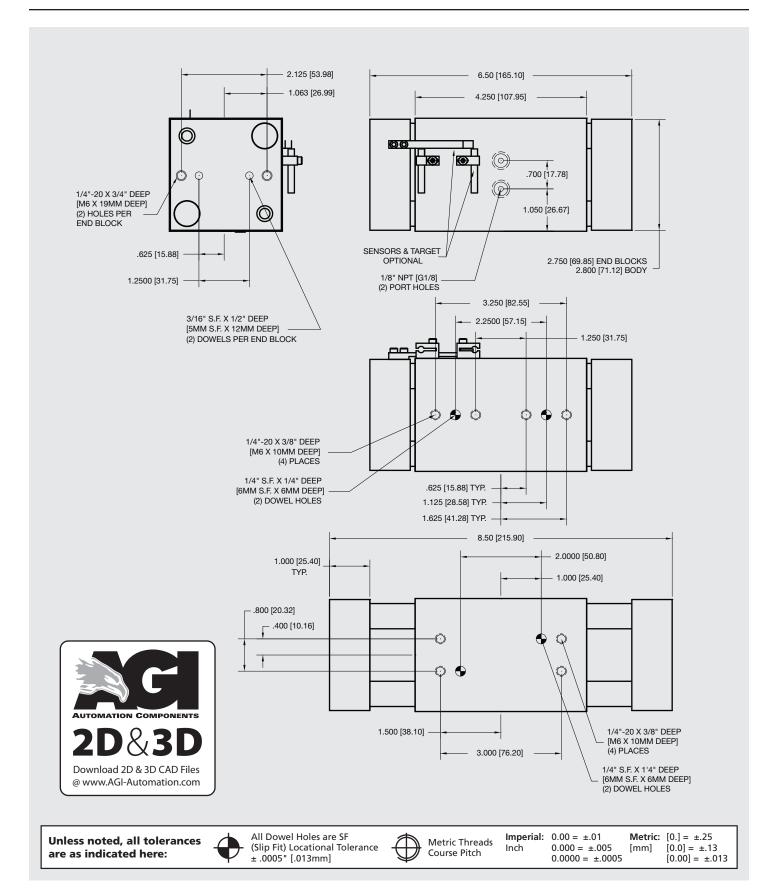


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC04, SPC04, SPQ04



AGW-625-2 Parallel Gripper Wide-Body, Synchronous/Non-Synchronous





AGW-625-4 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Jaws

Stroke: 4 in [101.6 mm]

Gripping Force @ 80 PSI Per Jaw [5.5 BAR]

Closing: 130 lbs [578 N] Opening: 132 lbs [587 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:

 Max Tensile T
 1300 lbs
 150 lbs

 Max Compressive C
 1300 lbs
 150 lbs

 15700 N]
 [667 N]

 150 lbs
 150 lbs

 15700 N]
 [667 N]

Max Moment M_X

1100 in/lb 120 in/lb
[124 Nm] [13.5 Nm]

Max Moment M_y

1500 in/lb 130 in/lb
[170 Nm] [14.7Nm]

Max Moment M_z

1100 in/lb 120 in/lb

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

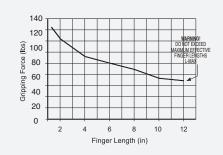
[124 Nm] [13.5 Nm]

 Weight:
 8 lbs
 [3.6 kg]

 Piston Diameter:
 1.625 in
 [41.3 mm]

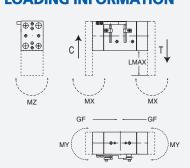
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HOLDING FORCES CHART



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

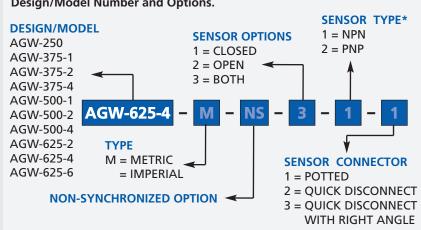
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

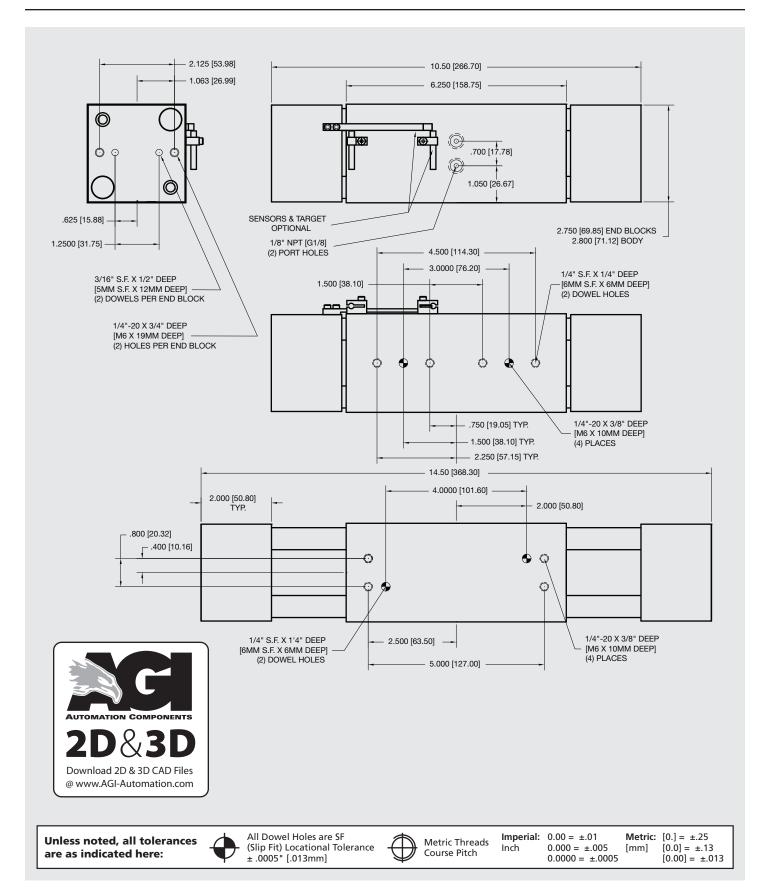


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC04, SPC04, SPQ04



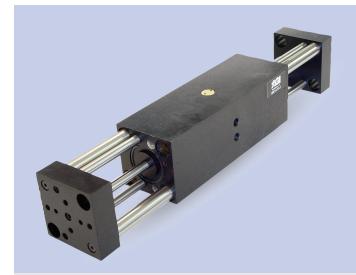
AGW-625-4 Parallel Gripper Wide-Body, Synchronous/Non-Synchronous





AGW-625-6 Parallel Gripper

Wide-Body, Synchronous/Non-Synchronous



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.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Jaws

Stroke: 6 in [152.4 mm]

Gripping Force @ 80 PSI Per Jaw [5.5 BAR]

Closing: 130 lbs [578 N] Opening: 132 lbs [587 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:

Max Tensile T 1300 lbs 150 lbs [5700 N] [667 N]

Max Compressive C 1300 lbs 150 lbs [5700 N] [667 N]

Max Moment M_X 1100 in/lb 120 in/lb [124 Nm] [13.5 Nm] Max Moment M_V 1500 in/lb 130 in/lb

[170 Nm] [14.7Nm]
Max Moment M_z 1100 in/lb 120 in/lb
[124 Nm] [13.5 Nm]

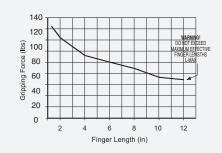
Material: High Strength, Hard Coated aluminum bronze alloys, Steel

Weight: 9.7 lbs [4.4 kg]

Piston Diameter: 1.625 in [41.3 mm]

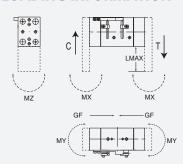
January 2009 - PATENTED Made in the USA

HOLDING FORCES CHART



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

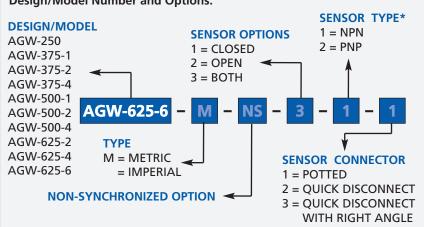
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

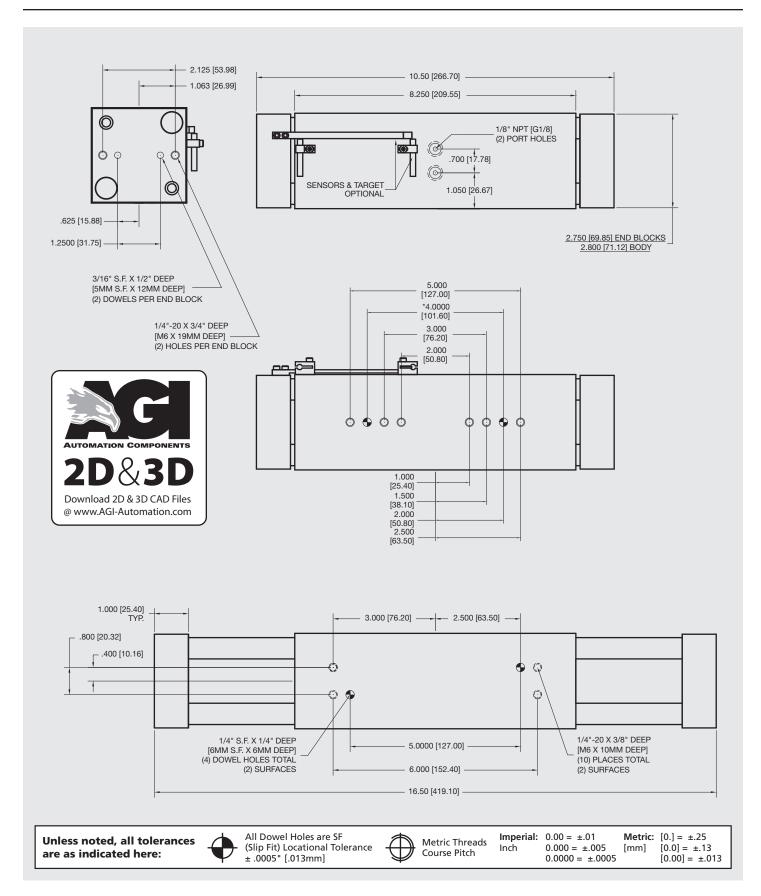


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC04, SPC04, SPQ04



AGW-625-6 Parallel Gripper Wide-Body, Synchronous/Non-Synchronous





AGP-23 Three Jaw Parallel Gripper

T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- High gripping force to weight ratio.
- Compact design with long stroke.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Hall effect sensors are available to monitor open and closed position of the jaws.
- AGP is fully field repairable for cost savings and minimum down time.
- Multiple mounting surfaces on jaw for easy tooling.
- Optional stripper plate ensures part preload in location upon release.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

.30 in [7.6mm] Stroke:

Gripping Force @ 80 PSI [5.5 BAR]

[129 N] Closing: 29 lbs 26 lbs [115 N] Opening:

Time:

Close: 0.22 sec [0.22 sec] 0.22 sec [0.22 sec] Open:

Pressure Range:

30-120 PSI [2-8 BAR] Low/High

Temperature Range:

-20°/180°F [-28°/80°C] Low/High

Side Play: ± 0.001 [.03 mm]

Repeatability

from Center: ± 0.002 [.06 mm]

Loading Capacity:

Static **Dynamic** Max Tensile T 300 lbs 100 lbs [1300 N] [444 N] Max Compressive C 300 lbs 100 lbs

[1300 N] [444 N] 250 in/lb 75 in/lb Max Moment M_x

[2.8 Nm] [8.5 Nm] Max Moment Mv 250 in/lb 75 in/lb [2.8 Nm] [8.5 Nm] 75 in/lb Max Moment M2 150 in/lb [17 Nm] [8.5 Nm]

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

9 oz [255 g]

Weight: **Piston Diameter:** 1.25 in [32 mm]

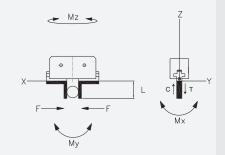
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HOLDING FORCES CHART

25 20 (sq) 15 **Gripping Force** 10 5 0 1.0 1.5 2.0

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

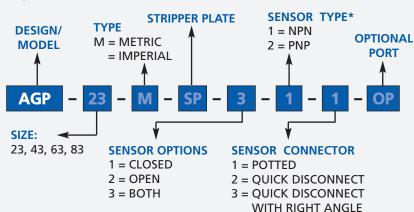
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

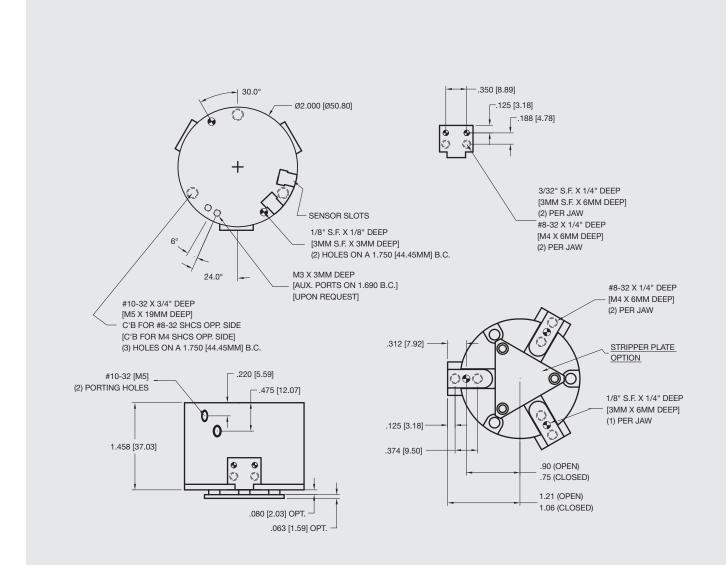


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter

Sensor Part # SHN02, SHNQ4, SHP02, SHPQ4



AGP-23 Three Jaw Parallel Gripper T-Slot Bearing Series





Unless noted, all tolerances are as indicated here:



All Dowel Holes are SF (Slip Fit) Locational Tolerance ± .0005" [.013mm]



Metric Threads Course Pitch

Imperial: $0.00 = \pm .01$ $0.000 = \pm .005$ $0.0000 = \pm .0005$

Metric: $[0.] = \pm .25$ [mm] $[0.0] = \pm .13$ $[0.00] = \pm .013$



AGP-43 Three Jaw Parallel Gripper

T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- High gripping force to weight ratio.
- Compact design with long stroke.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Hall effect sensors are available to monitor open and closed position of the jaws.
- AGP is fully field repairable for cost savings and minimum down time.
- Multiple mounting surfaces on jaw for easy tooling.
- Optional stripper plate ensures part preload in location upon release.

SPECIFICATIONS

Design: Parallel, Double Acting, Synchronized Jaws

Stroke: .40 in [10.2 mm]

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 80 lbs [355 N] Opening: 86 lbs [382 N]

Time:

Close: 0.22 sec [0.22 sec] Open: 0.22 sec [0.22 sec]

Pressure Range:

Low/High 30-120 PSI [2-8 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:

 Max Tensile T
 Static 760 lbs 270 lbs [3380 N]
 270 lbs [1200 N]

 Max Compressive C
 760 lbs 270 lbs

Max Compressive C 760 lbs 270 lbs [3380 N] [1200 N]

Max Moment M_X 760 in/lb 270 in/lb

[85.8 Nm] [30.5 Nm] Max Moment **M**_v 760 in/lb 270 in/lb

[85.8 Nm] [30.5 Nm] Max Moment M_z 300 in/lb 100 in/lb [34 Nm] [11.2 Nm]

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

Weight: 1.0 lbs [.5 kg]

Piston Diameter: 2.0 in. [50.8 mm]

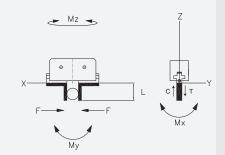
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HOLDING FORCES CHART

80 70 WARNING OWNER LENGTHS 60 (\$\hat{sq}\$) 50 0 .5 1.0 1.5 2.0 Finger Length (in)

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

LOADING INFORMATION

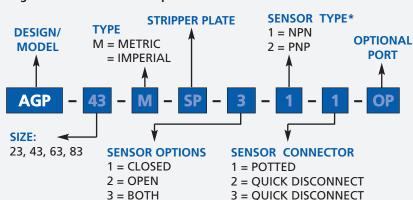


LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

WITH RIGHT ANGLE

HOW TO ORDER

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

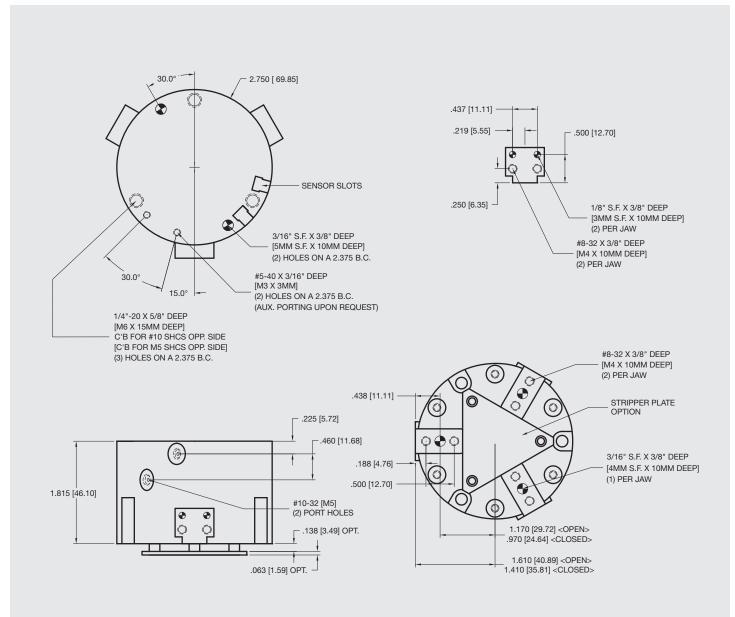


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SHN02, SHNQ4, SHP02, SHPQ4



AGP-43 Three Jaw Parallel Gripper T-Slot Bearing Series





Unless noted, all tolerances are as indicated here:



All Dowel Holes are SF (Slip Fit) Locational Tolerance ± .0005" [.013mm]



Metric Threads Course Pitch

Imperial: $0.00 = \pm .01$ $0.000 = \pm .005$ $0.0000 = \pm .0005$

Metric: $[0.] = \pm .25$ [mm] $[0.0] = \pm .13$ $[0.00] = \pm .013$



AGP-63 Three Jaw Parallel Gripper

T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- High gripping force to weight ratio.
- Compact design with long stroke.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Hall effect sensors are available to monitor open and closed position of the jaws.
- AGP is fully field repairable for cost savings and minimum down time.
- Multiple mounting surfaces on jaw for easy tooling.
- Optional stripper plate ensures part preload in location upon release.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: .62 in [15.7 mm]

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 200 lbs [889 N] Opening: 194 lbs [862 N]

Time:

Close: 0.22 sec [0.22 sec] Open: 0.22 sec [0.22 sec]

Pressure Range:

Low/High 30-120 PSI [2-8 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:

Max Tensile T 1250 lbs 400 lbs [5560 N] [1780 N]

Max Compressive C 1250 lbs 400 lbs [5560 N] [1780 N]

Max Moment M_x 1000 in/lb 400 in/lb [112 Nm] [45 Nm] 1000 in/lb 400 in/lb [112 Nm] [45 Nm]

Max Moment **M_z** 1000 in/lb 300 in/lb [112 Nm] [33.9 Nm]

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

Weight: 2.3 lbs [1 kg] **Piston Diameter:** 2.75 in [69.8 mm]

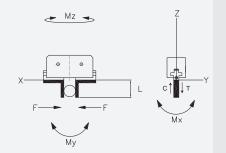
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HOLDING FORCES CHART

300 250 200 (20

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

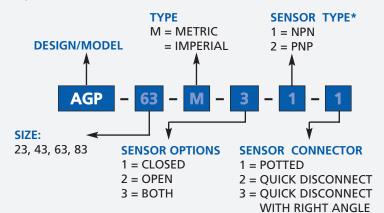
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

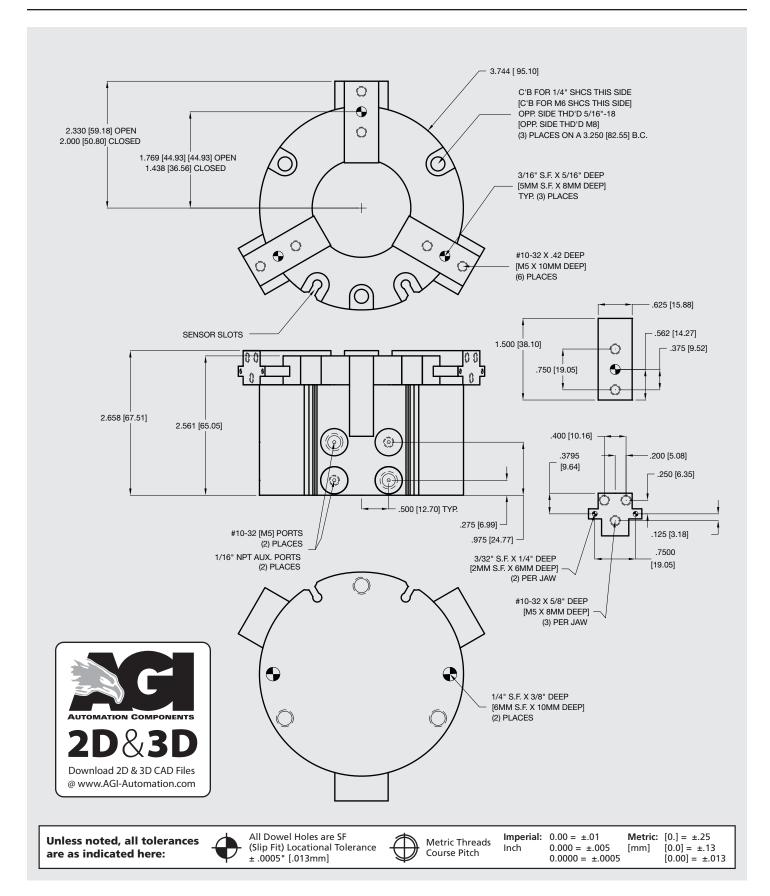


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SHN02, SHNQ4, SHP02, SHPQ4



AGP-63 Three Jaw Parallel Gripper T-Slot Bearing Series





AGP-83 Three Jaw Parallel Gripper

T-Slot Bearing Series



FEATURES AND BENEFITS

- Jaws are T-Slot bearing supported to prevent jaw breakage and offer superior load bearing performance.
- High gripping force to weight ratio.
- Compact design with long stroke.
- True parallel jaw motion for easy tooling.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulations.
- Hall effect sensors are available to monitor open and closed position of the jaws.
- AGP is fully field repairable for cost savings and minimum down time.
- Multiple mounting surfaces on jaw for easy tooling.
- Optional stripper plate ensures part preload in location upon release.

SPECIFICATIONS

Design: Parallel, Double Acting,

Synchronized Jaws

Stroke: .88 in [22.3 mm]

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 280 lbs [1245 N] Opening: 285 lbs [1267 N]

Time:

Close: 0.22 sec [0.22 sec]
Open: 0.22 sec [0.22 sec]

Pressure Range:

Low/High 30-120 PSI [2-8 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:

 Max Tensile T
 Static
 Dynamic

 100 lbs
 760 lbs

 19300 NJ
 [3380 NJ

 100 lbs
 760 lbs

 100 lbs
 760 lbs

[9300 N] [3380 N]

Max Moment M_X 2100 in/lb 760 in/lb [237 Nm] [85.8 Nm]
Max Moment M_y 2100 in/lb 760 in/lb [237 Nm] [85.8 Nm]

Max Moment M_z 1600 in/lb 550 in/lb [180 Nm] [62.1 Nm]

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

Weight: 6.0 lbs [2.7 kg] **Piston Diameter:** 3.5 in [89 mm]

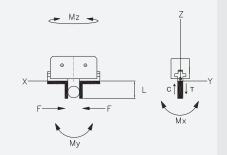
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HOLDING FORCES CHART

280 WARNING: DWARNING: DW

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

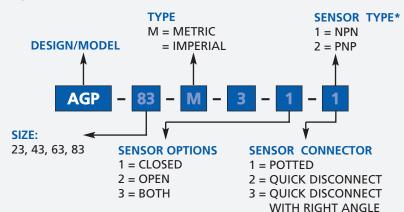
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

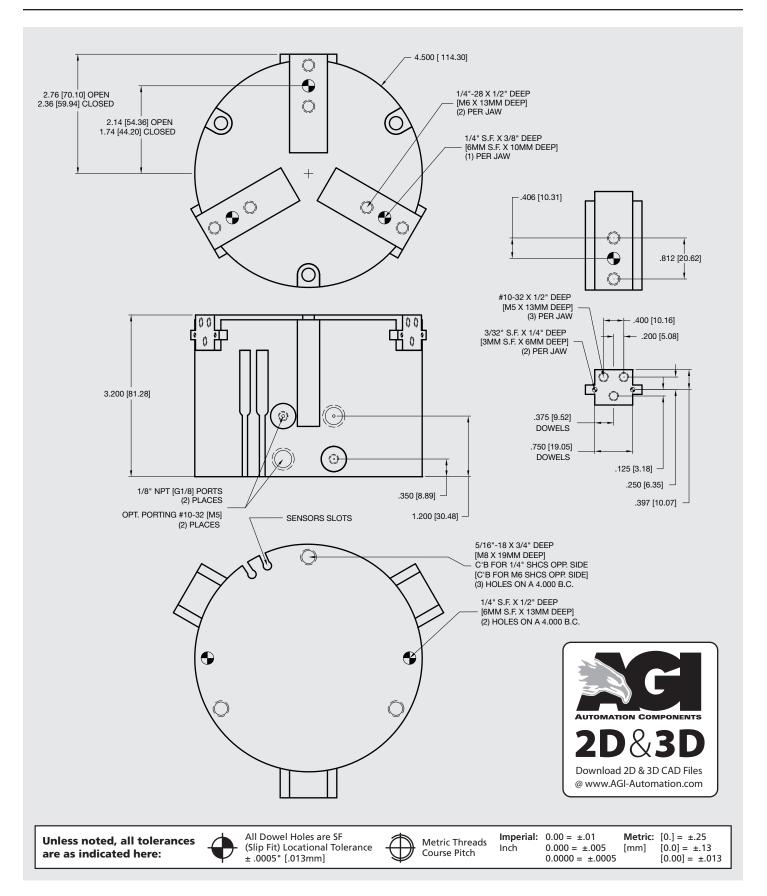


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SHN02, SHNQ4, SHP02, SHPQ4



AGP-83 Three Jaw Parallel Gripper T-Slot Bearing Series





AGM Gripper & Rotary Modules Rotary Manifold, Ultra Low Profile, Zero Backlash Units



ADVANCED FEATURES AND BENEFITS

- Internal Porting of Motion Module thru a rotary manifold.
- This prevents airlines from twisting, rubbing and sagging outside the unit.
- The rotary manifold connects the gripper and rotary actuator.
- This yields a versitile automation module system for assembly.

PRODUCT DETAILS:

Multi-Motion Actuators provide linear and rotary motion from one unit. The grip-and-turn motions are independent from one another, making it easy to sequence the two motions. The Multi Motion Module yields a versatile automation module for part pick and place applications and orientation operations. Internal porting prevents airlines from twisting, snagging, and breaking outside the unit.

MODULE COMBINATIONS:

Rotary	+	Gripper	=	Part #
AGR-1-90	+	AGP-250	=	AGM-1
AGR-1-180	+	AGP-250	=	AGM-2
AGR-2-90	+	AGP-250	=	AGM-3
AGR-2-180	+	AGP-250	=	AGM-4
AGR-2-90	+	AGP-375	=	AGM-5
AGR-2-180	+	AGP-375	=	AGM-6
AGR-2-90	+	AGP-500	=	AGM-7
AGR-2-180	+	AGP-500	=	AGM-8
AGR-2-90	+	AGW-250	=	AGM-9
AGR-2-180	+	AGW-250	=	AGM-10
AGR-3-90-M	+	AGW-375-1	=	AGM-11
AGR-3-180 -M	+	AGW-375-1	=	AGM-12
AGR-3-90-M	+	AGW-375-2	=	AGM-13
AGR-3-180-M	+	AGW-375-2	=	AGM-14
AGR-3-90-M	+	AGW-375-4	=	AGM-15
AGR-3-180-M	+	AGW-375-4	=	AGM-16

A total of 80 possible combinations available online

For detailed product specifications and CAD drawings, please visit our website at www.AGI-Automation.com





AGA Series





AGA-10 Angular Gripper

Double Guided, Low Profile



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required axis of travel.
- High gripping force to weight ratio.
- Compact design with long stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: Angular

Stroke: 0-180° adj

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 20 lbs [88 N] Opening: 22 lb [97 N]

Time:

Close: 0.2 sec [0.2 sec]
Open: 0.2 sec [0.2 sec]

Pressure Range:

Low/High 10-120 PSI [.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]

Static

Dvnamic

Loading Capacity:

Max Tensile T 22 lbs 14 lbs [100 N] [65 N] 22 lbs 14 lbs Max Compressive C [100 N] [65 N] 26 in/lb 9 in/lb Max Moment Mx [3 Nm] [1 Nm] 26 in/lb 9 in/lb Max Moment M_V [3 Nm] [1Nm] Max Moment M2 26 in/lb 9 in/lb [3 Nm] [1 Nm]

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

Weight: XX oz [XX g]
Piston Diameter: 0.5 in [13 mm]

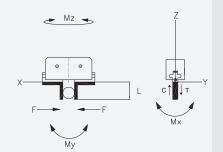
January 2009 - PATENTED Made in the USA

HOLDING FORCES CHART

GRIPPING FORCES CHART AGA-10 F 20 80 PSI 10 7 LBS. Max Tooling Length FINGER LENGTH

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

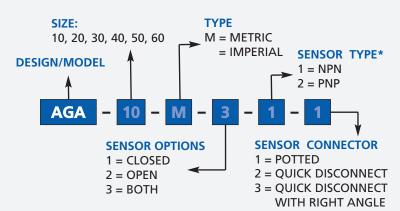
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

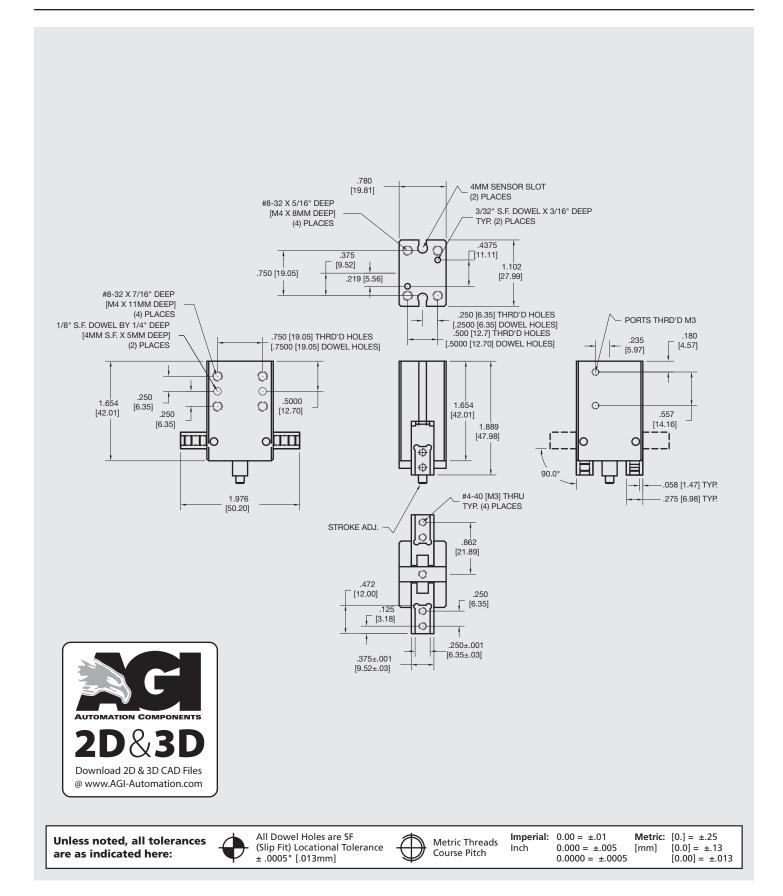


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC02, SPC02, SPQ04



AGA-10 Angular Gripper Double Guided, Low Profile





AGA-20 Angular Gripper

Double Guided, Low Profile



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required axis of travel.
- High gripping force to weight ratio.
- Compact design with long stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: Angular

Stroke: 0-180° adj

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 52 lbs [231 N] Opening: 55 lb [245 N]

Time:

Close: 0.2 sec [0.2 sec]
Open: 0.2 sec [0.2 sec]

Pressure Range:

Low/High 10-120 PSI [.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:

 Max Tensile T
 50 lbs
 20 lbs

 [222 N]
 [89 N]

 Max Compressive C
 50 lbs
 20 lbs

 [222 N]
 [89 N]

Max Moment M_X
60 in/lb 20 in/lb
[6.8 Nm] [2.3 Nm]
Max Moment M_y
120 in/lb 40 in/lb
[13.6 Nm] [4.5Nm]
Max Moment M_z
60 in/lb 20 in/lb

[6.8 Nm]

[2.3 Nm]

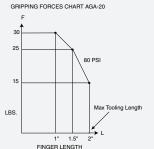
Material: High Strength, Hard Coated aluminum bronze alloys, Steel

 Weight:
 7 oz
 [198 g]

 Piston Diameter:
 0.787 in
 [20 mm]

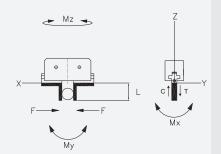
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HOLDING FORCES CHART GRIPPING FORCES CHART AGA-20



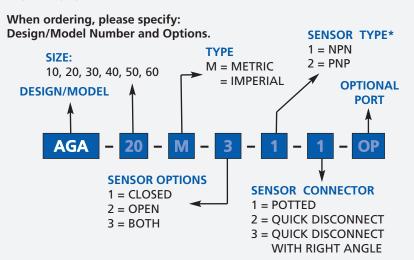
WARNING! Do not exceed tooling jaw length. See Chart above.

LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

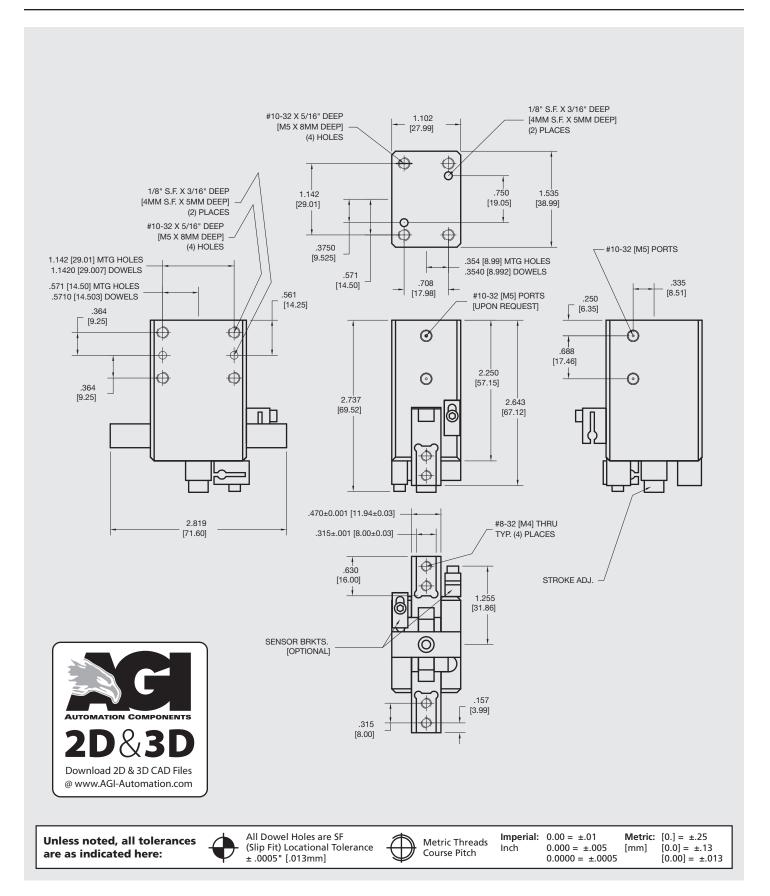


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC02, SPC02, SPQ04



AGA-20 Angular Gripper Double Guided, Low Profile





AGA-30 Angular Gripper

Double Guided, Low Profile



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required axis of travel.
- High gripping force to weight ratio.
- Compact design with long stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: Angular

Stroke: 0-180° adj

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 75 lbs [333 N] Opening: 62 lbs [275 N]

Time:

Close: 0.2 sec [0.2 sec]
Open: 0.2 sec [0.2 sec]

Pressure Range:

Low/High 10-120 PSI [.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:

 Max Tensile T
 Static 60 lbs [266 N]
 Dynamic 30 lbs [130 N]

 Max Compressive C
 60 lbs 30 lbs [266 N]
 30 lbs [130 N]

Max Moment M_x 90 in/lb 30 in/lb [10 Nm] [3.4 Nm]
Max Moment M_y 140 in/lb 35 in/lb [15.8 Nm] [4 Nm]

Max Moment **M_z** [15.8 Nm] [4 Nm] 90 in/lb 30 in/lb [10 Nm] [3.4 Nm]

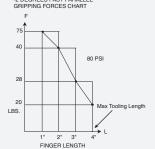
Material: High Strength, Hard Coated aluminum bronze alloys, Steel

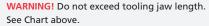
 Weight:
 1.5 lbs
 [.7 kg]

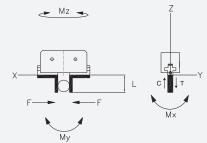
 Piston Diameter:
 1.125 in
 [28.5 mm]

January 2009 - PATENTED Made in the USA

HOLDING FORCES CHART -2 DEGREES PAST PARALLEL GRIPPING FORCES CHART F MZ MZ

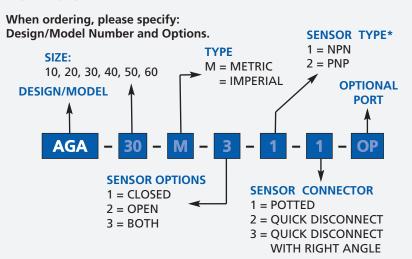






LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

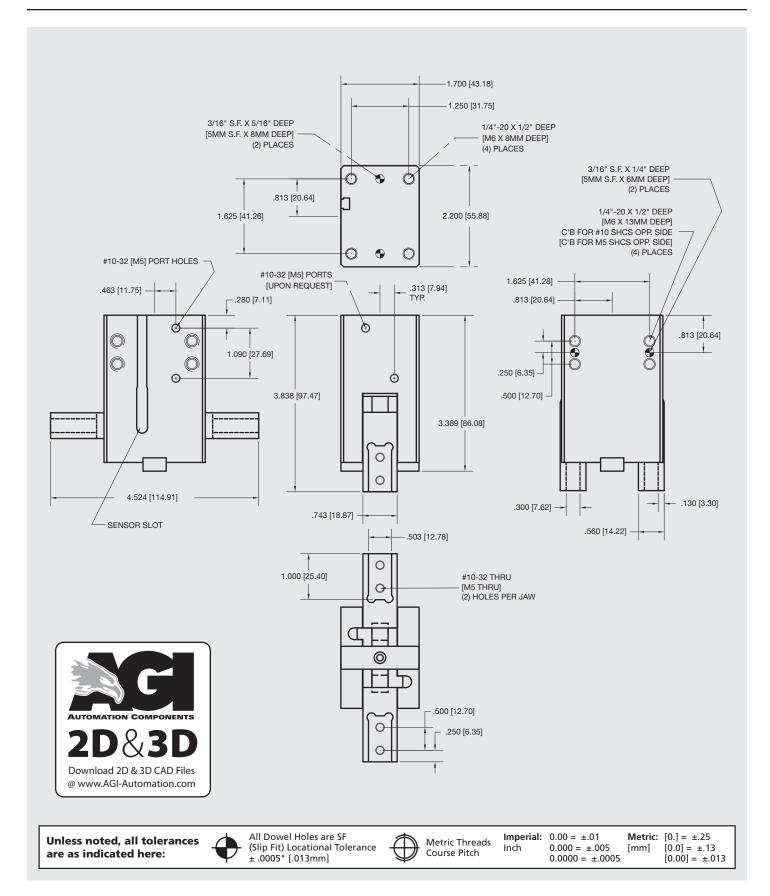


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC02, SPC02, SPQ04



AGA-30 Angular Gripper Double Guided, Low Profile





AGA-40 Angular Gripper

Double Guided, Low Profile



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required axis of travel.
- High gripping force to weight ratio.
- Compact design with long stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: Angular

Stroke: 0-180° adj

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 180 lbs [800 N] Opening: 168 lbs [747 N]

Time:

Close: 0.2 sec [0.2 sec] Open: 0.2 sec [0.2 sec]

Pressure Range:

Low/High 10-120 PSI [.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:

 Max Tensile T
 Static
 Dynamic

 40 lbs
 40 lbs

 [400 N]
 [177 N]

 Max Compressive C
 90 lbs
 40 lbs

 [400 N]
 [177 N]

Max Moment M_x

150 in/lb 430 in/lb
[17 Nm] [4.5 Nm]

Max Moment M_y

180 in/lb 45 in/lb
[20.3 Nm] [5 Nm]

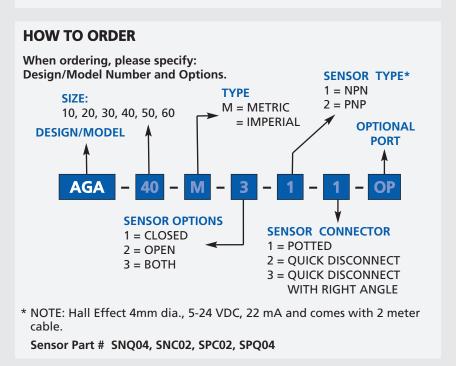
Max Moment **M_z** 150 in/lb 40 in/lb [17 Nm] [4.5 Nm]

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

 Weight:
 2.25 lbs [1 kg]

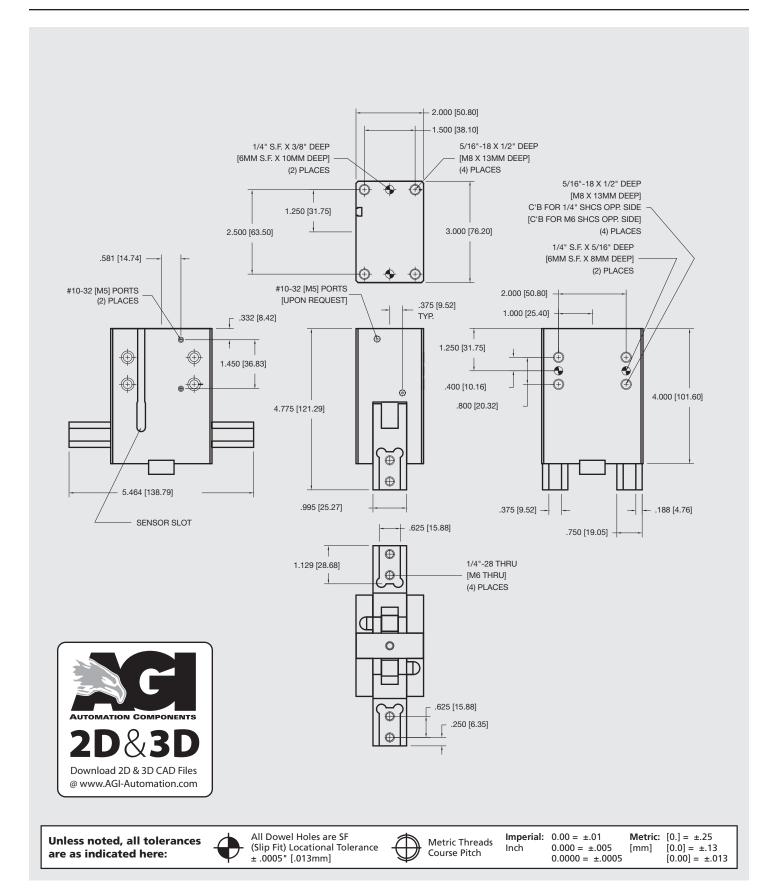
 Piston Diameter:
 1.5 in [38 mm]

January 2009 - PATENTED Made in the USA





AGA-40 Angular Gripper Double Guided, Low Profile





AGA-50 Angular Gripper

Double Guided, Low Profile



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required axis of travel.
- High gripping force to weight ratio.
- Compact design with long stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: Angular

Stroke: 0-180° adj

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 720 lbs [3200 N] Opening: 685 lbs [3050 N]

Time:

Close: 0.2 sec [0.2 sec]
Open: 0.2 sec [0.2 sec]

Pressure Range:

Low/High 10-120 PSI [.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:

 Max Tensile T
 Static
 Dynamic

 1200 lbs
 400 lbs

 [5330 N]
 [1780 N]

 Max Compressive C
 1200 lbs
 400 lbs

 [5330 N]
 [1780 N]

Max Moment M_x 930 in/lb 310 in/lb [105 Nm] [35 Nm]
Max Moment M_y 880 in/lb 276 in/lb [20.3 Nm] [31.2 Nm]
Max Moment M_z 880 in/lb 276 in/lb

[99.5 Nm] [31.2 Nm]

Material: High Strength, Hard Coated

 Weight:
 5.5 lbs
 [2.3 kg]

 Piston Diameter:
 2.25 in
 [57.2 mm]

aluminum bronze alloys, Steel

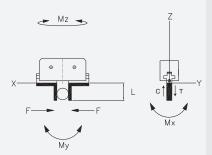
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HOLDING FORCES CHART

- 2 DEGREES PAST PARALLEL Gripping Force as a Functions of Opening Angle -2°= 720 lbs. 0 = 280 lbs. 45°= 70 lbs. 90°= 40 lbs. 400 400 400 1.97 3.0 4.0 5.0 6.0 7.0 8.0 Tooling Length (in)

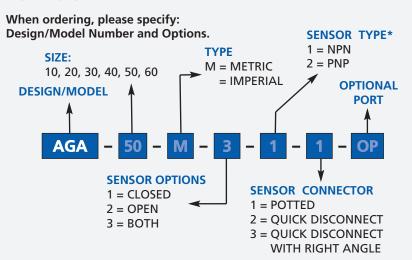
WARNING! Do not exceed tooling jaw length. See Chart above.

LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

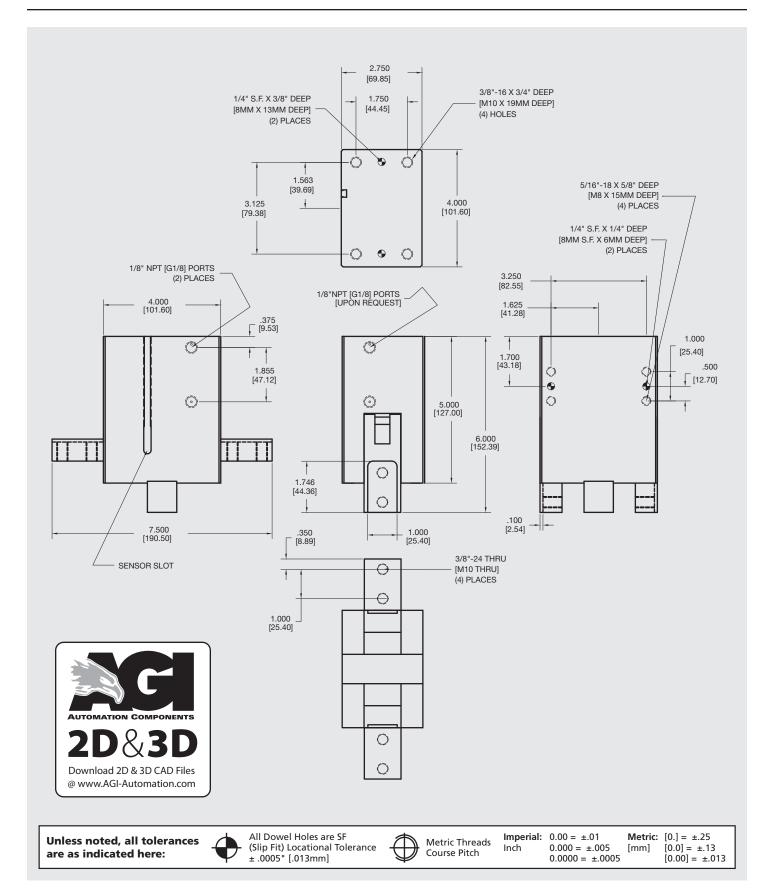


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC02, SPC02, SPQ04



AGA-50 Angular Gripper Double Guided, Low Profile





AGA-60 Angular Gripper

Double Guided, Low Profile



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required axis of travel.
- High gripping force to weight ratio.
- Compact design with long stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: Angular

Stroke: 0-180° adj

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 820 lbs [3600 N] Opening: 691 lbs [3070 N]

Time:

Close: 0.5 sec [0.5 sec] Open: 0.5 sec [0.5 sec]

Pressure Range:

Low/High 10-120 PSI [.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]

Static

Dvnamic

Loading Capacity:

Max Tensile T 1200 lbs 400 lbs [5330 N] [1780 N]

Max Compressive C 1200 lbs 400 lbs [5330 N] [1780 N]

Max Margant M 230 in/lb 310 in/lb

 Max Moment Mx
 930 in/lb
 310 in/lb

 [105 Nm]
 [35 Nm]

 Max Moment My
 880 in/lb
 276 in/lb

 [99.5 Nm]
 [31.2 Nm]

 Max Moment Mz
 880 in/lb
 276 in/lb

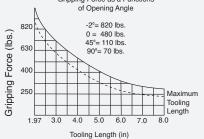
 [99.5 Nm]
 [31.2 Nm]

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

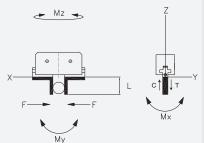
Weight: 6 lbs [2.7 kg]
Piston Diameter: 3.0 in [76 mm]

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+ COADING INFORMATION - 2 DEGREES PAST PARALLEL Gripping Force as a Functions of Opening Angle - 2° = 820 lbs.

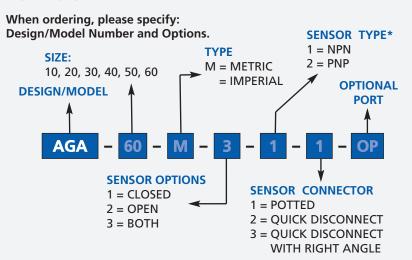


WARNING! Do not exceed tooling jaw length. See Chart above.



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

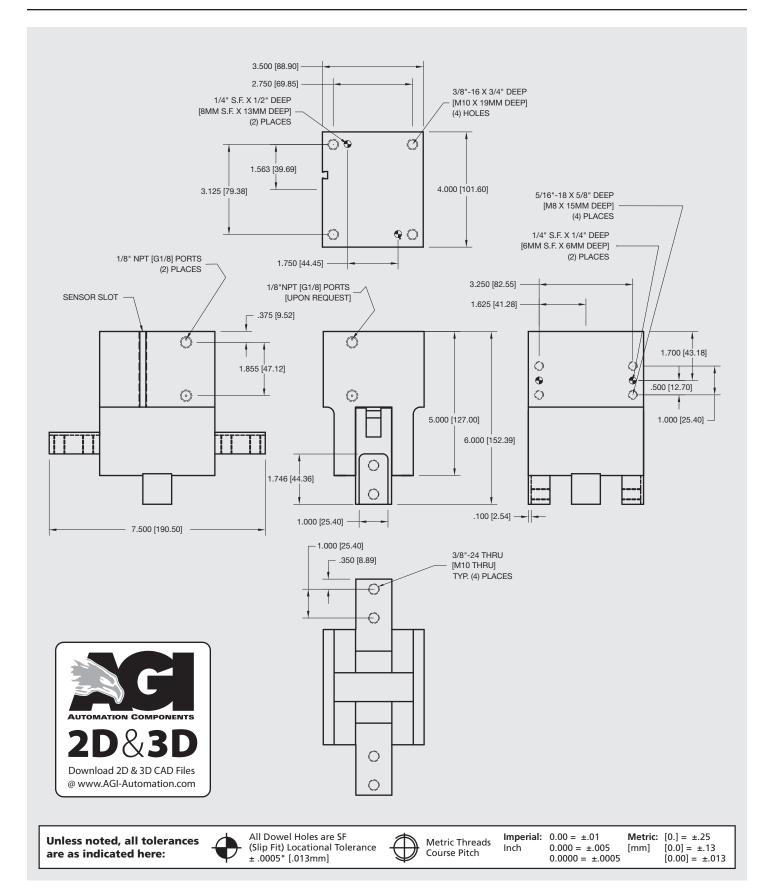


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SNQ04, SNC02, SPC02, SPQ04



AGA-60 Angular Gripper Double Guided, Low Profile





AGA-23 Angular Gripper 180° Three Jaw



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required
- High gripping force to weight ratio.
- Compact design with long, adjustable stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: 3-Jaw Angular

Stroke: 0-180° adjustable

Gripping Force @ 80 PSI [5.5 BAR]

Closing: 17 lbs [75 N] Opening: 20 lb [89 N]

Time:

0.2 sec [0.2 sec] Close: Open: 0.2 sec [0.2 sec]

Pressure Range:

Low/High 10-120 PSI [.7-8 BAR]

Temperature Range:

-20°/180°F [-28°/80°C] Low/High

[.03 mm] Side Play: ± 0.001

Repeatability

 ± 0.002 from Center: [.06 mm]

Loading Capacity:

Static **Dvnamic** Max Tensile T 50 lbs 20 lbs [222 N] [89 N] 20 lbs Max Compressive C 50 lbs [222 N] [89 N]

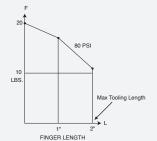
Max Moment Mx 60 in/lb 20 in/lb [6.8 Nm] [2.3 Nm] 120 in/lb Max Moment M_v 40 in/lb [13.6 Nm] [4.5Nm] 60 in/lb 20 in/lb Max Moment M₂ [6.8 Nm] [2.3 Nm]

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

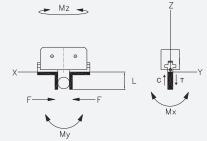
Weight: 1.0 lb [0.45 kg]**Piston Diameter:** 0.787 in [20 mm]

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LOADING INFORMATION HOLDING FORCES CHART ∠ Mz ✓



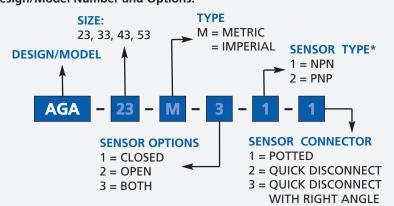
WARNING! Do not exceed tooling jaw length. See Chart above.



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

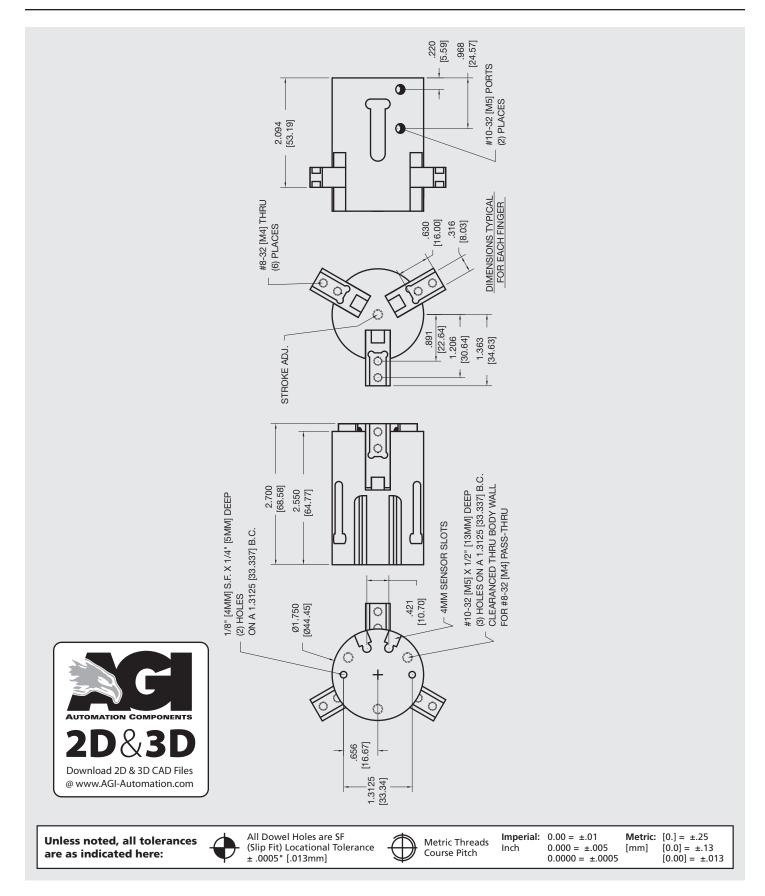


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter

Sensor Part # SNQ04, SNC02, SPC02, SPQ04



AGA-23 Angular Gripper 180° Three Jaw





AGA-33 Angular Gripper 180° Three Jaw



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required
- High gripping force to weight ratio.
- Compact design with long, adjustable stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: 3-Jaw Angular

Stroke: 0-180° adjustable

Gripping Force @ 80 PSI [5.5 BAR]

[115 N] Closing: 26 lbs Opening: 22 lbs [97 N]

Time:

0.3 sec [0.3 sec] Close: Open: 0.3 sec [0.3 sec]

Pressure Range:

Low/High 10-120 PSI [.7-8 BAR]

Temperature Range:

-20°/180°F [-28°/80°C] Low/High

 ± 0.001 [.03 mm] Side Play:

Repeatability

 ± 0.002 from Center: [.06 mm]

Loading Capacity:

Static **Dvnamic** Max Tensile T 60 lbs 30 lbs [266 N] [130 N] 60 lbs Max Compressive C 30 lbs

[266 N] [130 N] Max Moment M_x 90 in/lb 30 in/lb [10 Nm] [3.4 Nm]

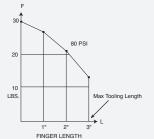
35 in/lb Max Moment M_V 140 in/lb [15.8 Nm] [4 Nm] Max Moment M₇ 90 in/lb 30 in/lb

[10 Nm] [3.4 Nm] Material: High Strength, Hard Coated aluminum bronze alloys, Steel

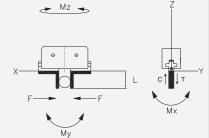
Weight: 2 lbs [1 kg] **Piston Diameter:** 1.125 in [28.5 mm]

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LOADING INFORMATION HOLDING FORCES CHART ∠ Mz ✓



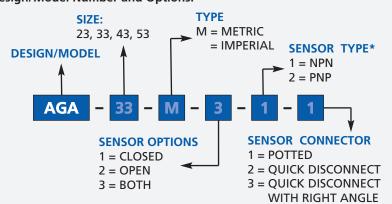
WARNING! Do not exceed tooling jaw length. See Chart above.



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

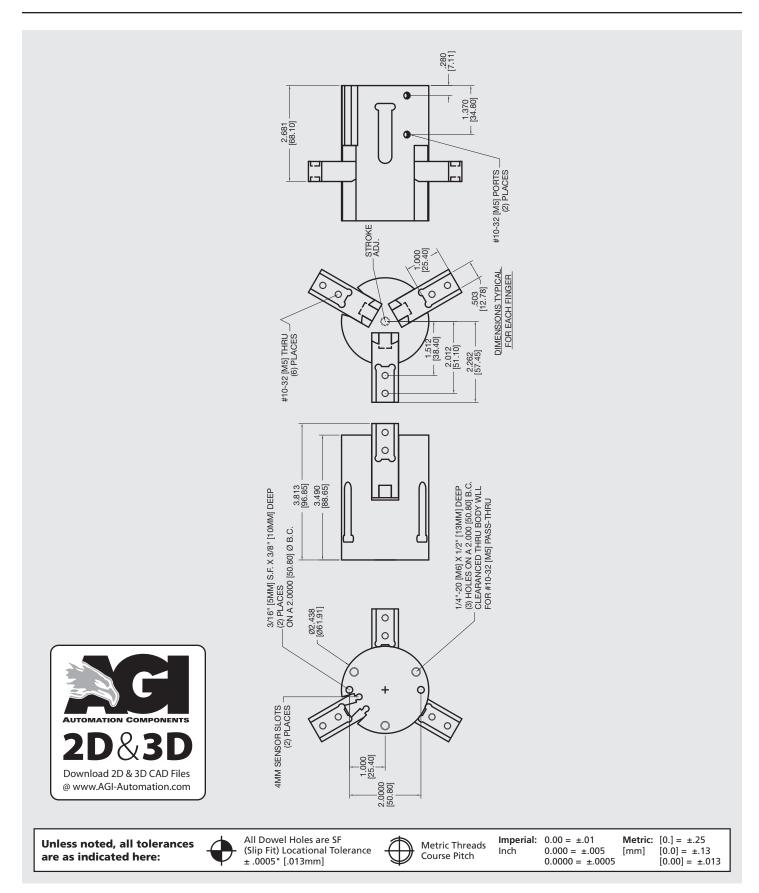


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter

Sensor Part # SNQ04, SNC02, SPC02, SPQ04



AGA-33 Angular Gripper 180° Three Jaw





AGA-43 Angular Gripper 180° Three Jaw



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required
- High gripping force to weight ratio.
- Compact design with long, adjustable stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: 3-Jaw Angular

Stroke: 0-180° adjustable

Gripping Force @ 80 PSI [5.5 BAR]

[266 N] Closing: 60 lbs Opening: 55 lbs [244 N]

Time:

0.4 sec [0.4 sec] Close: Open: 0.4 sec [0.4 sec]

Pressure Range:

Low/High 10-120 PSI [.7-8 BAR]

Temperature Range:

-20°/180°F [-28°/80°C] Low/High

 ± 0.001 [.03 mm] Side Play:

Repeatability

 ± 0.002 from Center: [.06 mm]

Loading Capacity:

Static **Dvnamic** Max Tensile T 90 lbs 40 lbs [400 N] [177 N] 90 lbs Max Compressive C 40 lbs [400 N] [177 N]

Max Moment M_x 150 in/lb 430 in/lb [4.5 Nm] [17 Nm] Max Moment M_v 180 in/lb 45 in/lb [20.3 Nm] [5 Nm]

150 in/lb Max Moment M₂ 40 in/lb [17 Nm] [4.5 Nm]

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

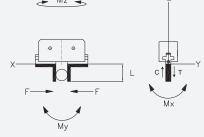
Weight: 3.5 lbs [1.6 kg]**Piston Diameter:** 1.5 in [38 mm]

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LOADING INFORMATION HOLDING FORCES CHART -2 DEGREES PAST PARALLEL GRIPPING FORCES CHART ∠ Mz ✓



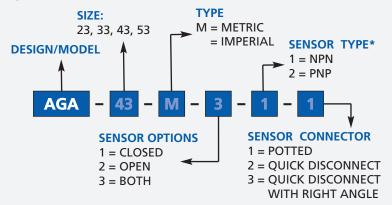
WARNING! Do not exceed tooling jaw length. See Chart above.



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

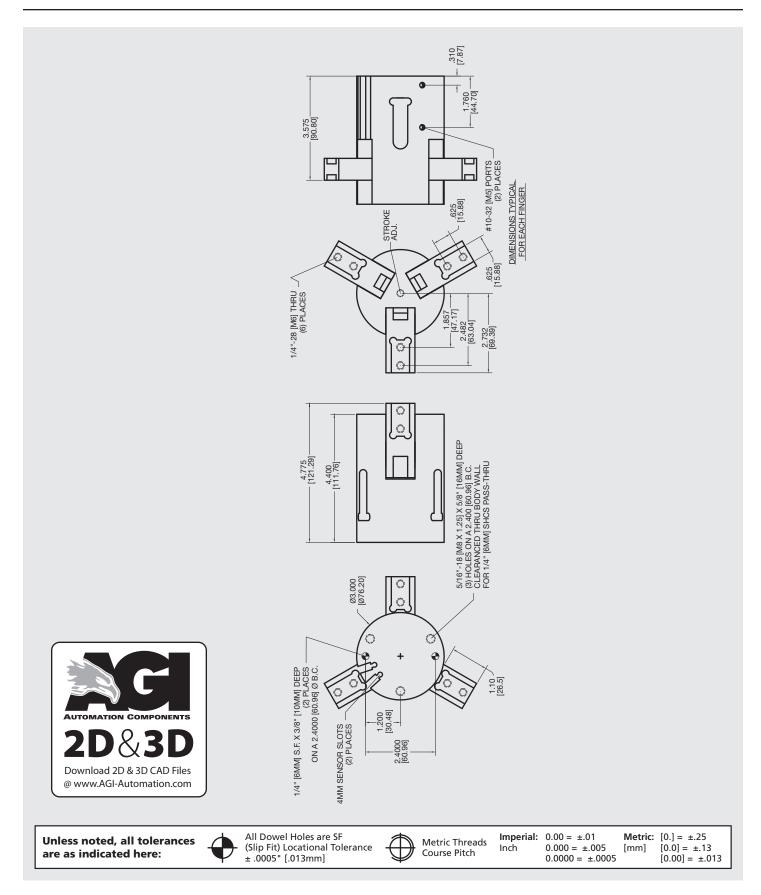


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter

Sensor Part # SNQ04, SNC02, SPC02, SPQ04



AGA-43 Angular Gripper 180° Three Jaw





AGA-53 Angular Gripper 180° Three Jaw



FEATURES AND BENEFITS

- Grippers provide up to 180° of angular jaw travel allowing the jaws to completely retract from the work area eliminating another required
- High gripping force to weight ratio.
- Compact design with long, adjustable stroke.
- Jaw rotations can be adjusted from 0-90° to allow the gripper to be custom fit to each application.
- Units are permanently lubricated for non-lube air operation, allowing for compliance with OSHA regulation.
- Proximity sensors are available to monitor open and closed position of the jaws.
- AGA is fully field repairable for cost savings and minimum down time.
- The gripper body has two mounting surfaces with dowel pin holes to provide accurate mounting in a variety of positions.

SPECIFICATIONS

Design: 3-Jaw Angular

Stroke: 0-180° adjustable

Gripping Force @ 80 PSI [5.5 BAR]

200 lbs [888 N] Closing: Opening: 170 lbs [758 N]

Time:

0.4 sec [0.4 sec] Close: Open: 0.4 sec [0.4 sec]

Pressure Range:

Low/High 10-120 PSI [.7-8 BAR]

Temperature Range:

-20°/180°F [-28°/80°C] Low/High

Side Play: ± 0.001 [.03 mm]

Repeatability

 ± 0.002 from Center: [.06 mm]

Loading Capacity:

Static **Dvnamic** Max Tensile T 1200 lbs 400 lbs [5330 N] [1780 N] Max Compressive C 1200 lbs 400 lbs [5330 N] [1780 N]

Max Moment Mx 930 in/lb 310 in/lb [105 Nm] [35 Nm] 880 in/lb Max Moment M_V 276 in/lb [99.5 Nm] [31.2 Nm] 880 in/lb 276 in/lb Max Moment M₂

[99.5 Nm] [31.2 Nm] Material: High Strength, Hard Coated

Weight: 8 lbs [3.6 kg]**Piston Diameter:** 2.25 in [57.2 mm]

aluminum bronze alloys, Steel

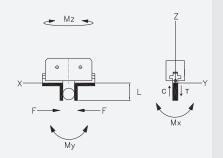
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HOLDING FORCES CHART

2 DEGREES PAST PARALLEL of Opening Angle -2°= 20 lbs 200 (lbs.) 150 Force 100 Gripping Lenath 2.0 3.0 Tooling Length (in)

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

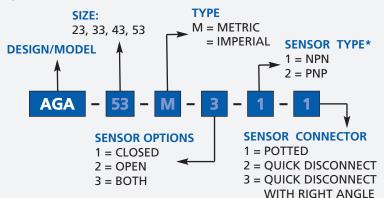
LOADING INFORMATION



LOOK! More Technical specifications for sensors on "Sensors Accessories" page.

HOW TO ORDER

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

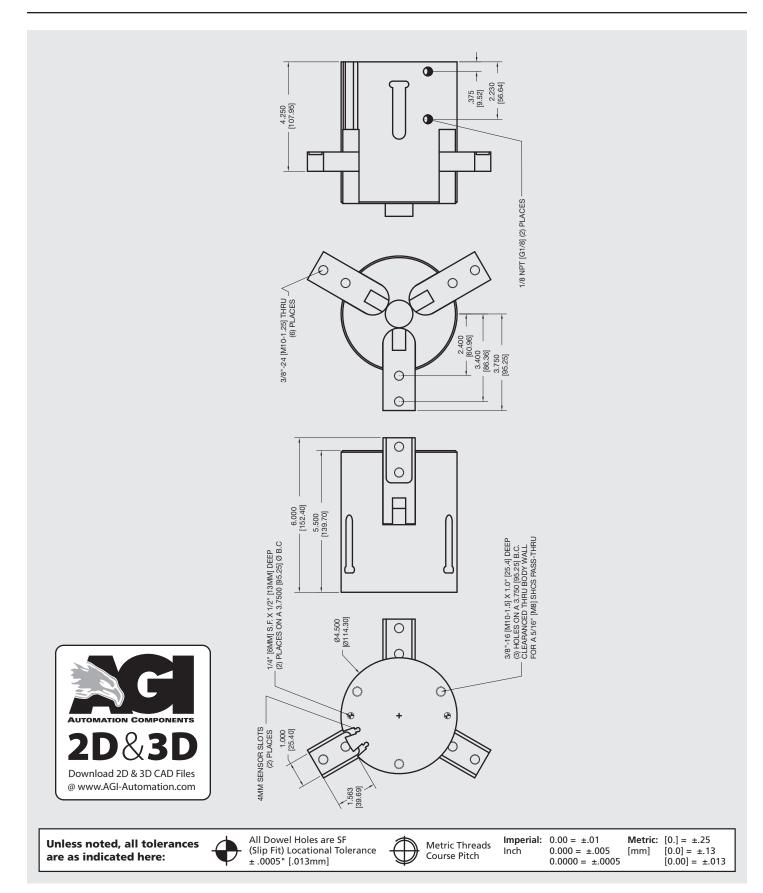


* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter

Sensor Part # SNQ04, SNC02, SPC02, SPQ04

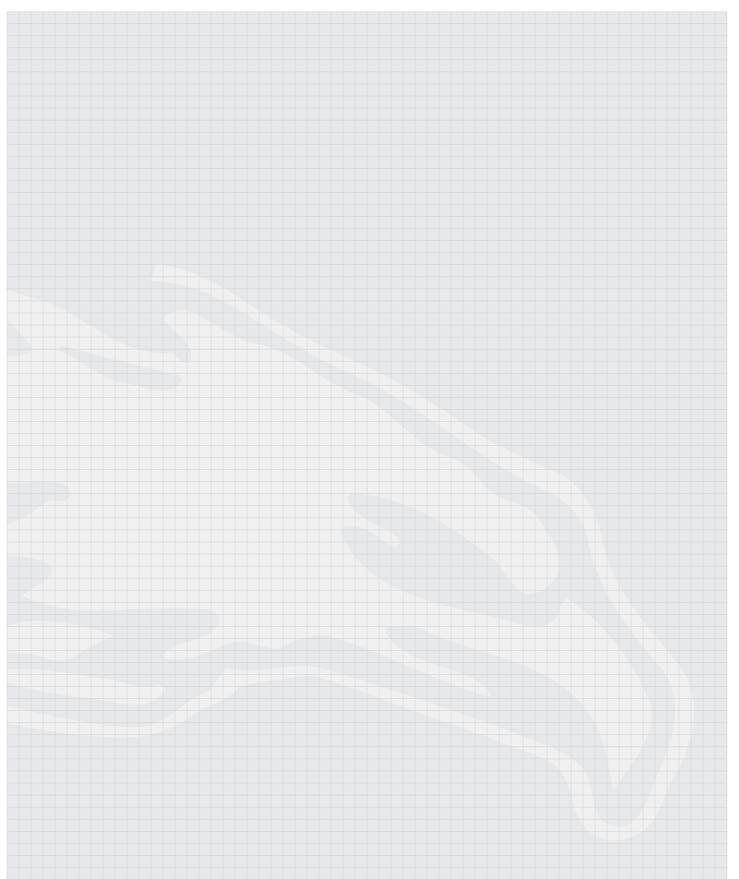


AGA-53 Angular Gripper 180° Three Jaw





Notes





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 stoke.
- 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 stoke 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-.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: 3 lbs [1.3 kg]

Material: High Strength, Aluminum Alloys,

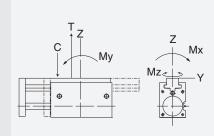
Bronze

Weight: 2.5 oz [70.1 g]

Piston Diameter: .50 in [12.7 mm]

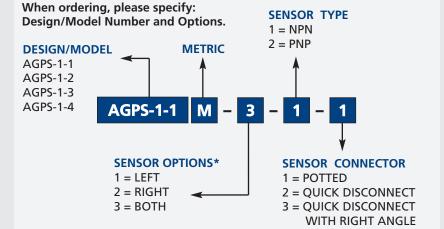
January 2008 - PATENTED Made in the USA

MAXIMUM FORCES & MOMENTS



Static **Dynamic** Max Tensile T 50 lbs 20 lbs [222 N] [89 N] Max Compressive C 50 lbs 20 lbs [89 N] [222 N] Max Moment M_x 25 in/lb 15 in/lb [2.8 Nm] [1.7Nm] Max Moment M_v 30 in/lb 15 in/lb [3.4 Nm] [1.7Nm] Max Moment M₇ 30 in/lb 15 in/lb [3.4 Nm] [1.7Nm]

HOW TO ORDER

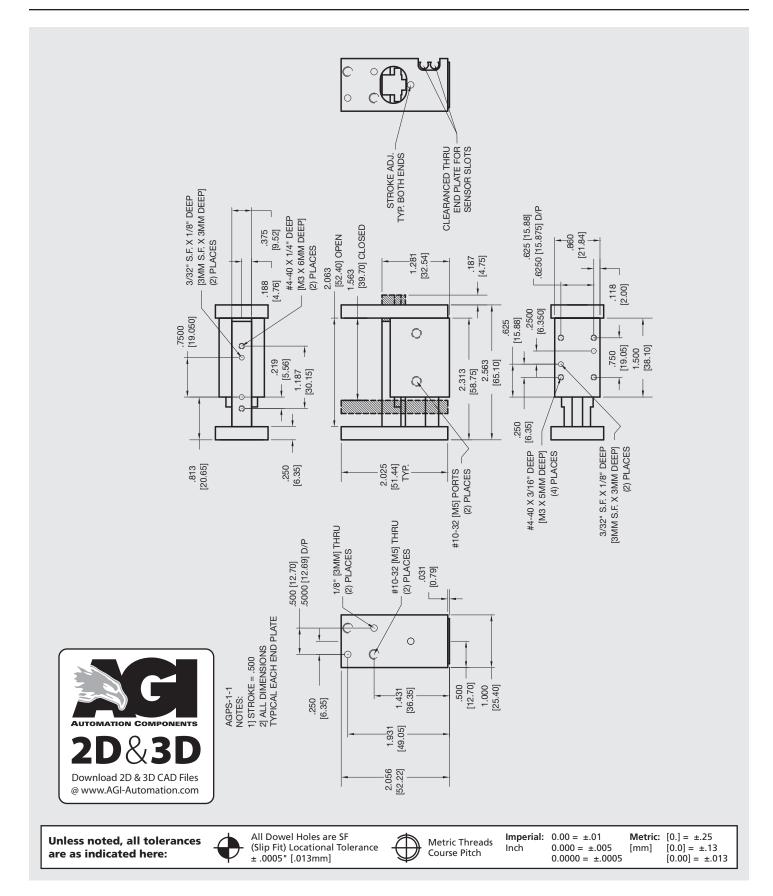


* NOTE: Hall Effect sensors – Potted or Quick disconnect.

Sensor Part # SHN01, SHP01, SHNQ3, SHPQ3



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





AGPS-1-2 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 stoke.
- 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 stoke on extend and retract.

SPECIFICATIONS

Design: Built-in air cylinder

T-slot slide

Stroke: 1 inch [25.4 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: 7 lbs [3.2 kg]

Material: High Strength, Aluminum Alloys,

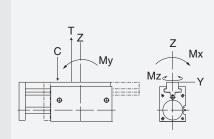
Bronze

Weight: 3.2 oz [90 g]

Piston Diameter: .50 in [12.7 mm]

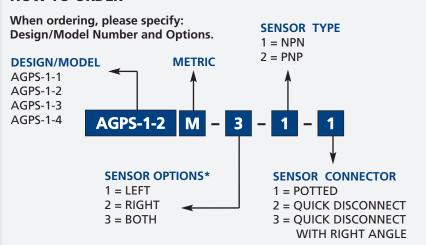
January 2008 - PATENTED Made in the USA

MAXIMUM FORCES & MOMENTS



Static **Dynamic** Max Tensile T 75 lbs 32 lbs [333 N] [142 N] Max Compressive C 75 lbs 32 lbs [142 N] [333 N] Max Moment M_x 60 in/lb 30 in/lb [6.7 Nm] [3.4 Nm] 30 in/lb Max Moment M_v 60 in/lb [6.7 Nm] [3.4 Nm] Max Moment M₇ 60 in/lb 30 in/lb [6.7 Nm] [3.4 Nm]

HOW TO ORDER

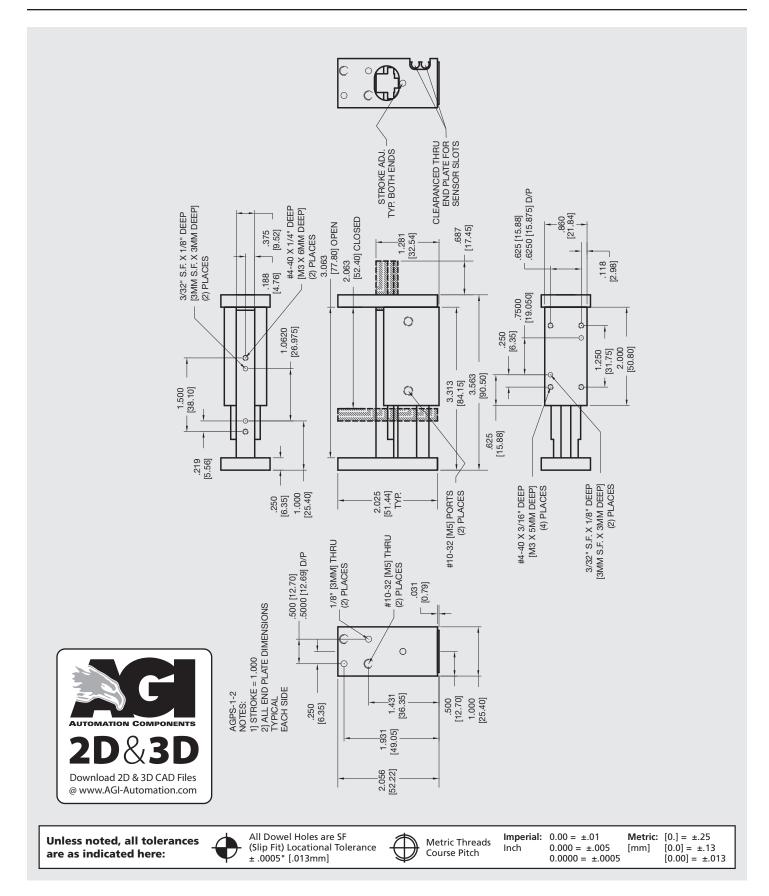


* NOTE: Hall Effect sensors – Potted or Quick disconnect.

Sensor Part # SHN01, SHP01, SHNQ3, SHPQ3



AGPS-1-2 Parallel Gripper Single Finger, One Fixed Jaw





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 stoke.
- 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 stoke 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:

20-120 PSI [1.4-8 BAR] Low/High

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

100 lbs

[444 N]

[444 N]

80 in/lb

[9 Nm]

80 in/lb

[9 Nm]

80 in/lb

[9 Nm]

Dynamic

42 lbs

[186 N]

42 lbs

[186 N]

40 in/lb

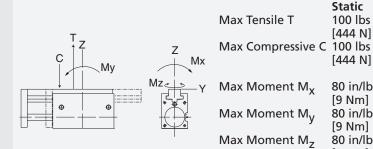
[4.5 Nm]

40 in/lb

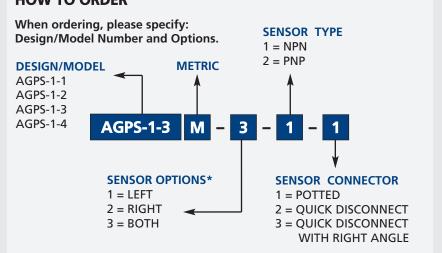
[4.5 Nm]

40 in/lb

[4.5 Nm]



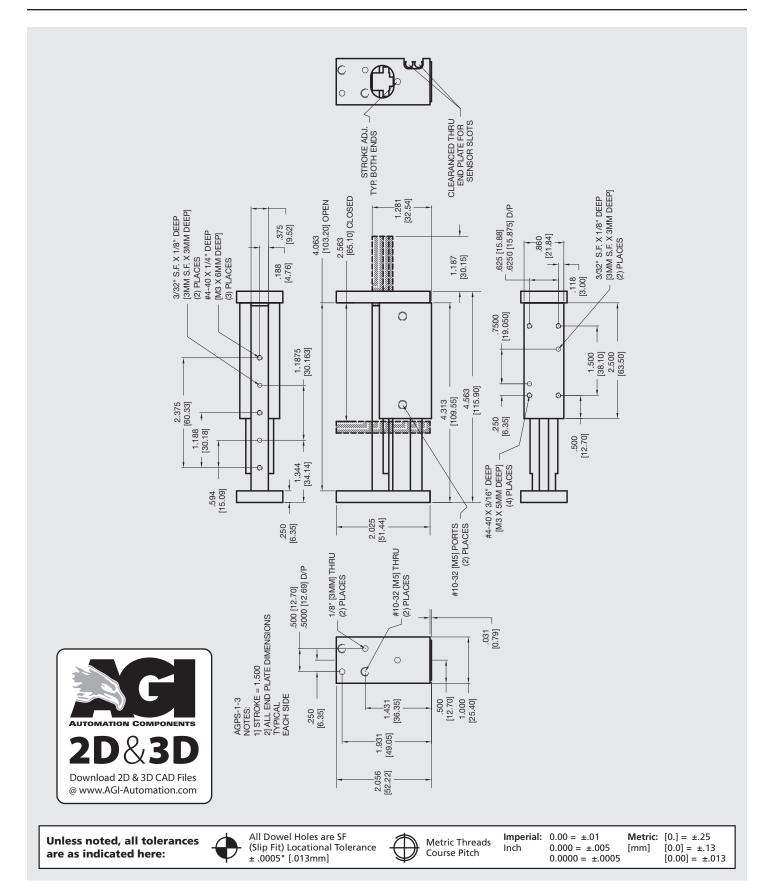
HOW TO ORDER



* NOTE: Hall Effect sensors - Potted or Quick disconnect.



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





AGPS-1-4 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 stoke.
- 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 stoke on extend and retract.

SPECIFICATIONS

Design: Built-in air cylinder

T-slot slide

Stroke: 2.0 in [50.8 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: 18 lbs [81.6 kg]

Material: High Strength, Aluminum Alloys,

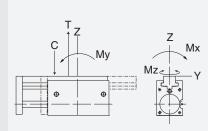
Bronze

Weight: 5 oz [142 g]

Piston Diameter: .50 in [12.7 mm]

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MAXIMUM FORCES & MOMENTS



 Max Tensile T
 Static
 Dynamic

 130 lbs
 55 lbs

 [578 N]
 [244 N]

 Max Compressive C
 130 lbs
 55 lbs

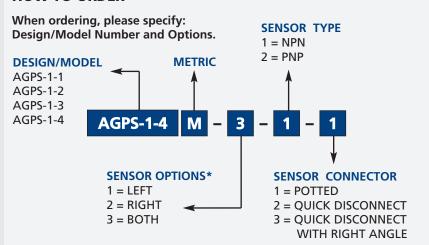
 [578 N]
 [244 N]

Max Moment M_X Max Moment M_Y

Max Moment M₇

110 in/lb 50 in/lb [12.5 Nm] [6.7 Nm] 110 in/lb 50 in/lb [12.5 Nm] [6.7 Nm] 110 in/lb 50 in/lb [12.5 Nm] [6.7 Nm]

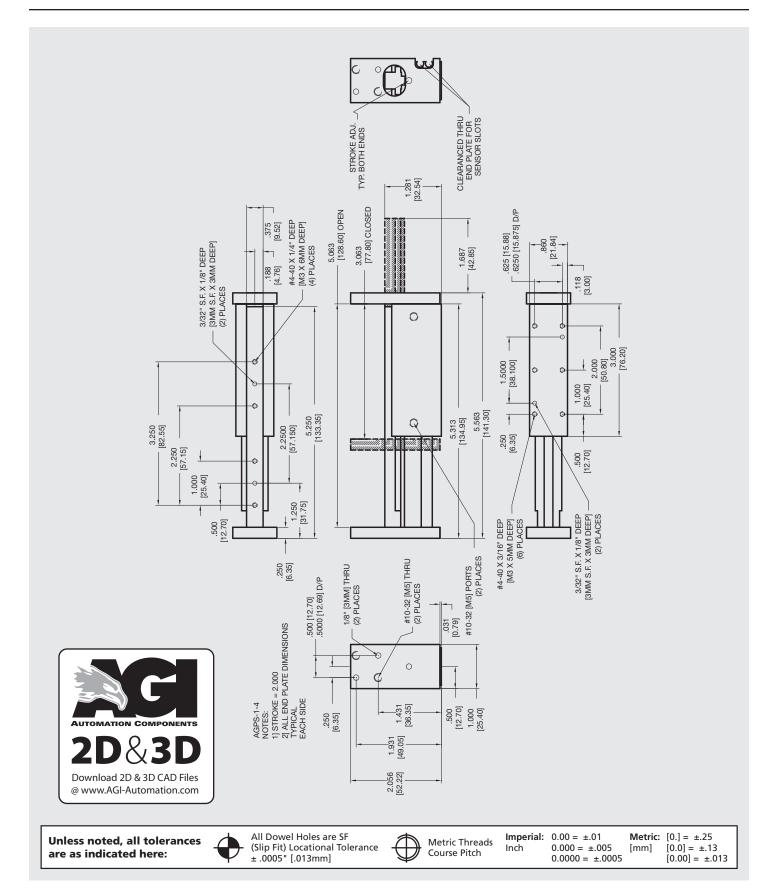
HOW TO ORDER



* NOTE: Hall Effect sensors – Potted or Quick disconnect.



AGPS-1-4 Parallel Gripper Single Finger, One Fixed Jaw





AGPS-2-1 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 stoke.
- 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 stoke on extend and retract.

SPECIFICATIONS

Design: Built-in air cylinder

T-slot slide

Stroke: 0.5 in [12.7 mm]

Thrust Force @ 80 PSI [5.5 BAR]

Extended: 35 lbs [155 N] Retract: 33 lbs [146 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: 7 lbs [3.2 kg]

Material: High Strength, Aluminum Alloys,

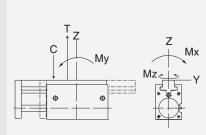
Bronze

Weight: 4.2 oz [120 g]

Piston Diameter: .750 in [19 mm]

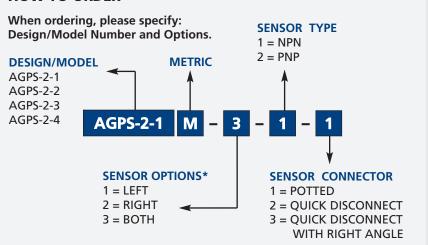
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MAXIMUM FORCES & MOMENTS



Static **Dynamic** Max Tensile T 80 lbs 34 lbs [355 N] [151 N] 34 lbs Max Compressive C 80 lbs [355 N] [151 N] 35 in/lb 19 in/lb Max Moment M_x [3.9 Nm] [2.2 Nm] 19 in/lb Max Moment M_v 35 in/lb [3.9 Nm] [2.2 Nm] Max Moment M₇ 35 in/lb 19 in/lb [3.9 Nm] [2.2 Nm]

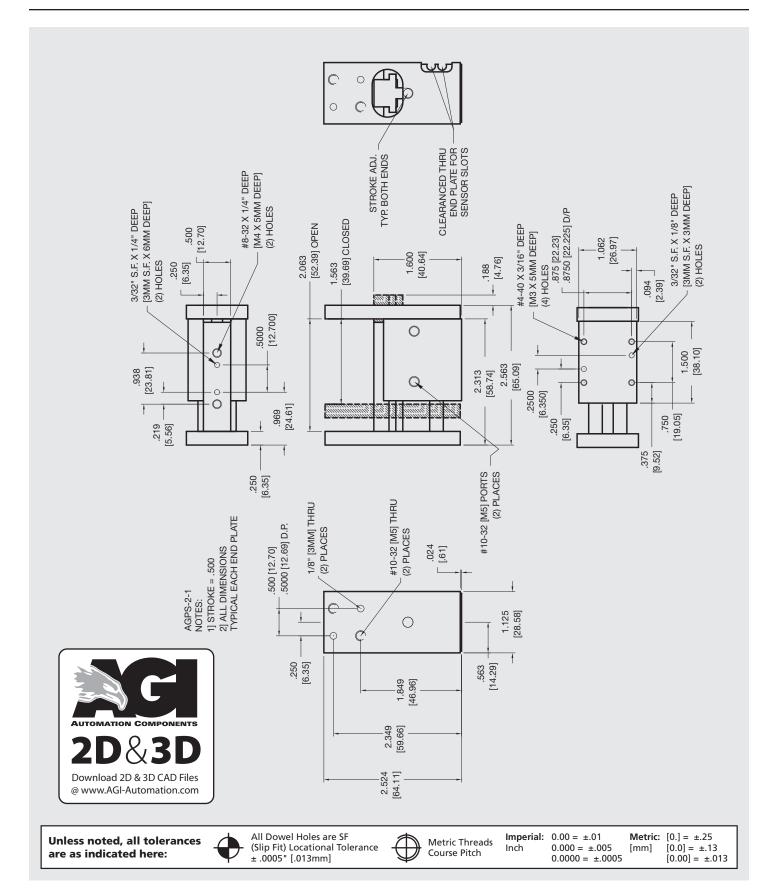
HOW TO ORDER



* NOTE: Hall Effect sensors are hard wired with 20" pigtail.



AGPS-2-1 Parallel Gripper Single Finger, One Fixed Jaw





AGPS-2-2 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 stoke.
- 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 stoke on extend and retract.

SPECIFICATIONS

Design: Built-in air cylinder

T-slot slide

Stroke: 1 in [25.4 mm]

Thrust Force @ 80 PSI [5.5 BAR]

Extended: 35 lbs [155 N] Retract: 33 lbs [146 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: 13 lbs [5.9 kg]

Material: High Strength, Aluminum Alloys,

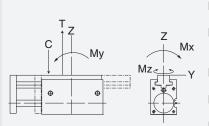
Bronze

Weight: 5.6 oz [160 g]

Piston Diameter: .750 in [19 mm]

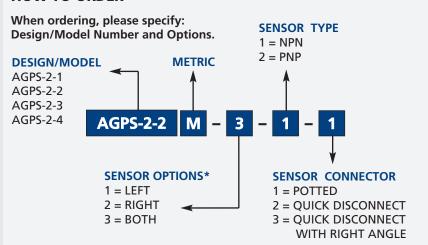
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MAXIMUM FORCES & MOMENTS



Static **Dynamic** Max Tensile T 140 lbs 60 lbs [622 N] [266 N] Max Compressive C 140 lbs 60 lbs [622 N] [266 N] 70 in/lb 30 in/lb Max Moment M_x [8 Nm] [3.4 Nm] 70 in/lb Max Moment M_v 30 in/lb [8 Nm] [3.4 Nm] Max Moment M₇ 70 in/lb 30 in/lb [8 Nm] [3.4 Nm]

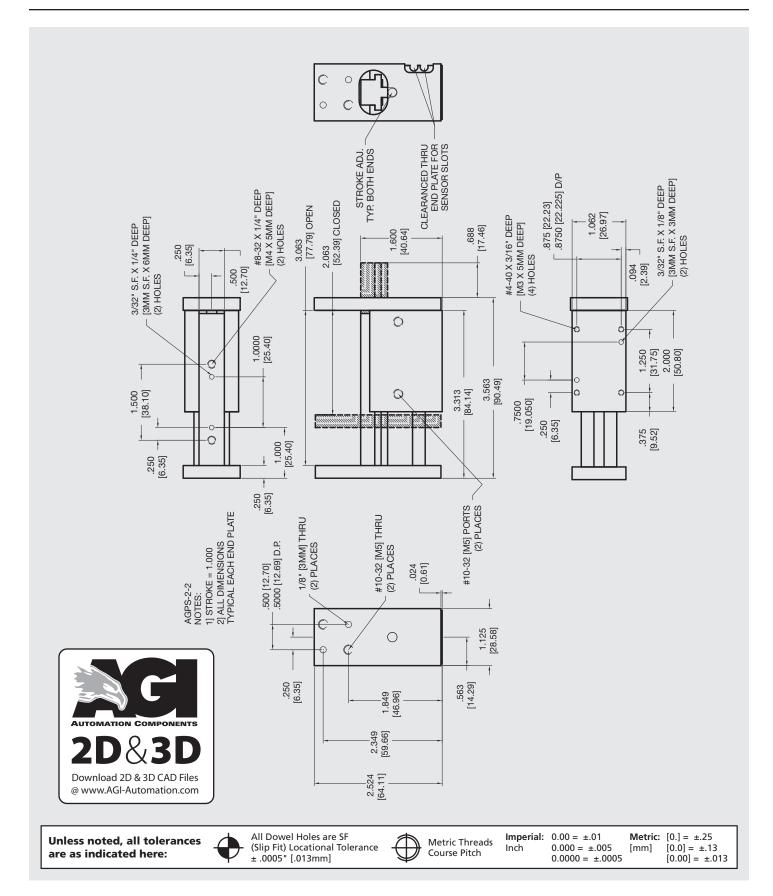
HOW TO ORDER



* NOTE: Hall Effect sensors are hard wired with 20" pigtail.



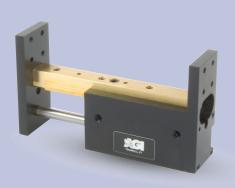
AGPS-2-2 Parallel Gripper Single Finger, One Fixed Jaw





AGPS-2-3 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 stoke.
- 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 stoke 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: 35 lbs [155 N] Retract: 33 lbs [146 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: 24 lbs [10.8 kg]

Material: High Strength, Aluminum Alloys,

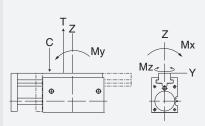
Bronze

Weight: 6.8 oz [193 g]

Piston Diameter: .750 in [19 mm]

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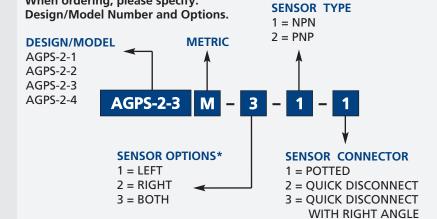
MAXIMUM FORCES & MOMENTS



When ordering, please specify:

Static **Dynamic** Max Tensile T 180 lbs 77 lbs [800 N] [342 N] Max Compressive C 180 lbs 77 lbs [800 N] [342 N] 70 in/lb 34 in/lb Max Moment M_x [3.8 Nm] [8 Nm] 70 in/lb Max Moment M_v 34 in/lb [8 Nm] [3.8 Nm] Max Moment M₇ 70 in/lb 34 in/lb [8 Nm] [3.8 Nm]

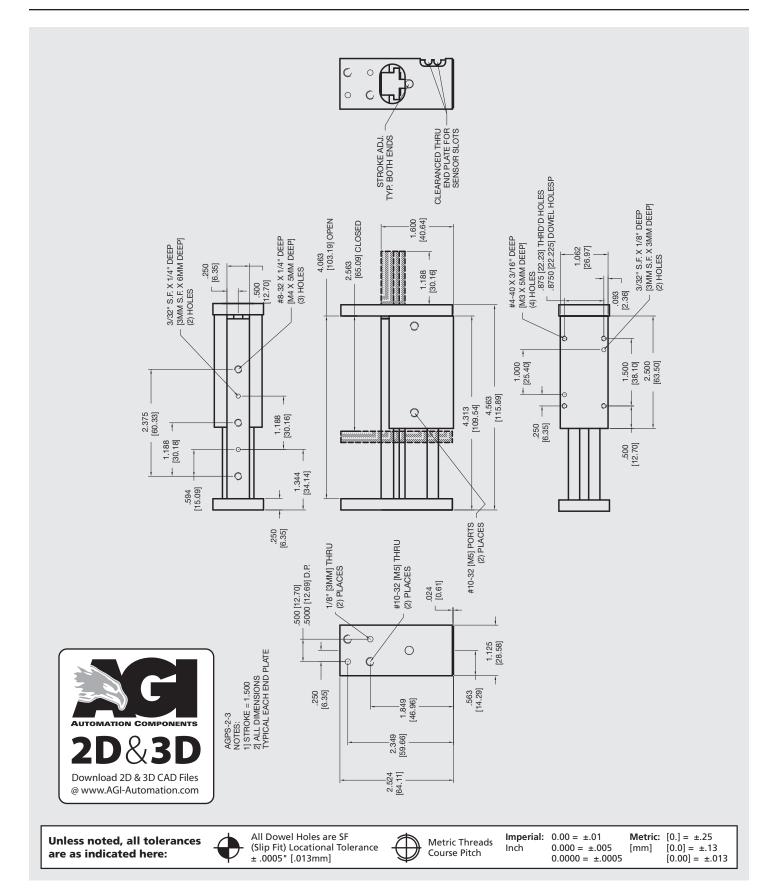
HOW TO ORDER



* NOTE: Hall Effect sensors are hard wired with 20"pigtail.



AGPS-2-3 Parallel Gripper Single Finger, One Fixed Jaw





AGPS-2-4 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 stoke.
- 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.
- Standard built-in stroke adjustment and stroke lock for precise, repetitive operation.
- 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 stoke on extend and retract.

SPECIFICATIONS

Design: Built-in air cylinder

T-slot slide

Stroke: 2 in [50.8 mm]

Thrust Force @ 80 PSI [5.5 BAR]

Extended: 35 lbs [155 N] Retract: 33 lbs [146 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: 30 lbs [13.6 kg]

Material: High Strength, Aluminum Alloys,

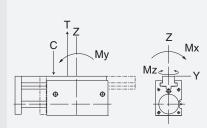
Bronze

Weight: 8.4 oz [240 g]

Piston Diameter: .750 in [19 mm]

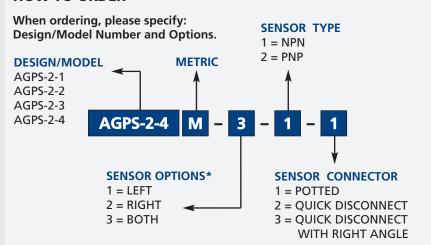
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MAXIMUM FORCES & MOMENTS



Static **Dynamic** Max Tensile T 250 lbs 108 lbs [1112 N] [800 N] Max Compressive C 250 lbs 108 lbs [1112 N] [800 N] Max Moment M_x 120 in/lb 62 in/lb [8 Nm] [7 Nm] Max Moment M_v 120 in/lb 62 in/lb [8 Nm] [7 Nm] Max Moment M₇ 120 in/lb 62 in/lb [8 Nm] [7 Nm]

HOW TO ORDER



* NOTE: Hall Effect sensors are hard wired with 20"pigtail.

andary 2000 TATEIVIED Made in the OSP



AGPS-2-4 Parallel Gripper Single Finger, One Fixed Jaw

