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

Stroke: .30 in [7.6mm]

Gripping Force @ 80 PSI [5.5 BAR]
Closing: 29 lbs [129 N]
Opening: 26 lbs [115 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 300 lbs [1300 N]
Dynamic 100 lbs [444 N]

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

Max Moment M_x
250 in/lb [2.8 Nm]
75 in/lb [8.5 Nm]

Max Moment M_y
250 in/lb [2.8 Nm]
75 in/lb [8.5 Nm]

Max Moment M_z
150 in/lb [17 Nm]
75 in/lb [8.5 Nm]

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

Weight: 9 oz [255 g]
Piston Diameter: 1.25 in [32 mm]

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HOLDING FORCES CHART

LOADING INFORMATION

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

LOADING INFORMATION


HOW TO ORDER

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

- DESIGN/ MODEL: AGP
- STRIPPER PLATE: M
- SENSOR TYPE*: 1 = NPN
- SENSOR: 3
- OPTIONAL PORT: 1

SENSOR OPTIONS

1 = CLOSED
2 = OPEN
3 = BOTH

SENSOR CONNECTOR

1 = POTTED
2 = QUICK DISCONNECT
3 = QUICK DISCONNECT WITH RIGHT ANGLE

SIZE: 23, 43, 63, 83

Sensor Part #: SHN02, SHNQ4, SHP02, SHPQ4

* NOTE: Hall Effect 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.
Unless noted, all tolerances are as indicated here:

- All Dowel Holes are SF (Slip Fit) Locational Tolerance ± .0005" [.013mm]
- Metric Threads Course Pitch
  - Imperial: 0.00 = ±.01  0.000 = ±.005  0.0000 = ±.0005
  - Metric: [0.] = ±.25 [0.0] = ±.13 [0.00] = ±.013

- 3/32" S.F. X 1/4" DEEP [3MM S.F. X 6MM DEEP] (2) PER JAW
- #8-32 X 1/4" DEEP [M4 X 6MM DEEP] (2) PER JAW
- M3 X 3MM DEEP [M4 X 6MM DEEP] (2) PER JAW
- SENSOR SLOTS 1/8" S.F. X 1/8" DEEP [3MM S.F. X 3MM DEEP] (2) HOLES ON A 1.750 [44.45MM] B.C.
- #10-32 X 3/4" DEEP [M5 X 19MM DEEP] C/B FOR #8-32 SHCS OPP. SIDE [C/B FOR M4 SHCS OPP. SIDE] (3) HOLES ON A 1.750 [44.45MM] B.C.
- #10-32 [M5] (2) PORTING HOLES
- .080 [.03] OPT. .063 [.02] OPT.
- Ø 2.000 [.508]
- .125 [3.18] .374 [9.50]
- .475 [12.07]
- .045 [1.14]
- .90 (OPEN) .75 (CLOSED)
- 24.0° 30.0° 6°