AGR-4 Rotary Actuator
Low Profile, Zero Backlash, Optional Rotary Manifold

FEATURES AND BENEFITS

- Built in adjustable hardstops on output flange stops against a dowel pin imbedded in the body to prevent pinion breakage, and give accurate specific rotation requirements.
- Two large bearings, one on either side of the pinion, provides for steady output flange with high loading capacity.
- Ultra high torque to weight ratio for faster cycle times.
- Compact body design to fit into tight space applications.
- Units are permanently lubricated for non-lube air operation, allowing compliance with OSHA regulations.
- All rotary units have zero backlash at either end of rotation, this keeps the output flange against the hard stop.
- Built in adjustable flow controls allow for maximum cycle times and smooth deceleration.
- Proximity switches are available to monitor end of rotation.
- The AGR unit is fully repairable for cost savings and minimum down time.

SPECIFICATIONS

Design: Rack and Pinion with Flange Hard Stop

Rotation Range: 0°-180° (Adj. +/- 5°)
Payload: 15 lbs central to axis of rotation [6.8 Kg]
Torque: @80 psi [5.5 BAR] 100 in/lb [11.3 Nm]
Bearing Load:
  Dynamic 1390 lbs [6180 N]
  Static 2150 lbs [9560 N]
Rotation Time: No load .40 second
Pressure Range:
  Low/High 30-120 PSI [2-8 BAR]
Temperature Range:
  Low/High -20˚/180˚F [ -28˚/80˚C]
Backlash: Zero
Accuracy: .001 concentric and perpendicular to axis of rotation
Material: High Strength, Hard Coated Aluminum Alloys, Steel
Weight: 5.0 lb [2.3 kg]
Piston Diameter: (2x) 1.25 in [32 mm]

LOADING INFORMATION

Max Tensile T 200 lbs [889 N]
Max Compressive C 1000 lbs [4448 N]
Max Moment Mx 500 in/lb [56.5 Nm]
Max Moment My 500 in/lb [56.5 Nm]

WARNING! Do not exceed tooling jaw length.

HOW TO ORDER

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

DESIGN/MODEL
AGR-3
AGR-4
AGR-5
DEGREE OF
ROTATION
180°
90°
SENSOR TYPE*
1 = NPN
2 = PNP
MID- STOP
1 = CLOSED
2 = OPEN
3 = BOTH
ROTARY MANIFOLD
1 = POTTED
2 = QUICK DISCONNECT
3 = QUICK DISCONNECT WITH RIGHT ANGLE

SENSOR OPTIONS

NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.
Sensor Part # SPC05, SPQ05, SNC05, SNQ05

January 2009 - PATENTED  Made in the USA

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

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  - Imperial: 0.00 = ±.01
  - Metric: [mm] [0.0] = ±.25

Mid-Stop shown shaded

-S option

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