



AGR-1 Rotary Actuator

Low Profile, Zero Backlash



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: 1 lb central to axis of rotation [.44 Kg]

Torque:
@80 psi [5.5 BAR] 5 in/lb [.56 Nm]

Bearing Load:
Dynamic 198 lbs [880 N]
Static 385 lbs [1620 N]

Rotation Time: No load .1 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: 7 oz [198 g]

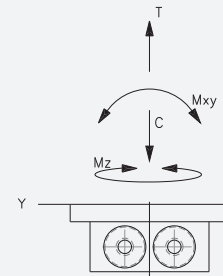
Piston Diameter: (2x) .5 in [12.7 mm]

January 2008 - PATENTED Made in the USA

LOADING CAPACITY

| | Static | Dynamic |
|-------------------|------------------------|----------------------|
| Max Tensile T | 50 lbs [222 N] | 12 lbs [53 N] |
| Max Compressive C | 250 lbs [1110 N] | 50 lbs [222 N] |
| Max Moment M_x | 100 in/lb [11.3 Nm] | 25 in/lb [2.8 Nm] |
| Max Moment M_y | 100 in/lb [11.3 Nm] | 25 in/lb [2.8 Nm] |

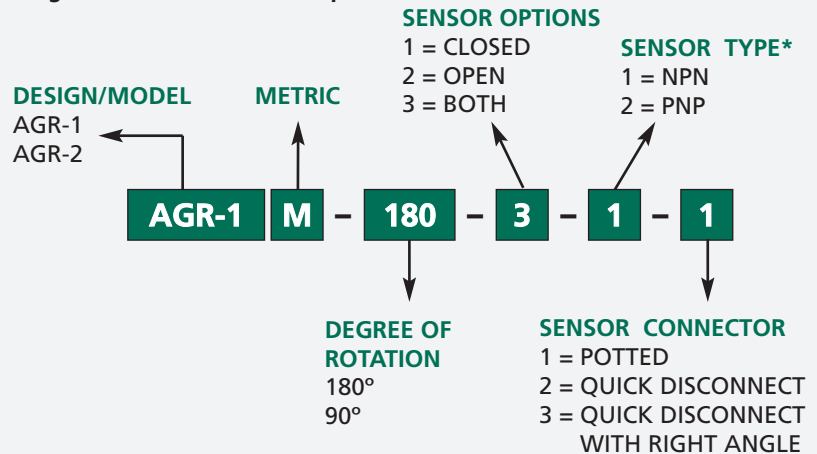
LOADING INFORMATION



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

HOW TO ORDER

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

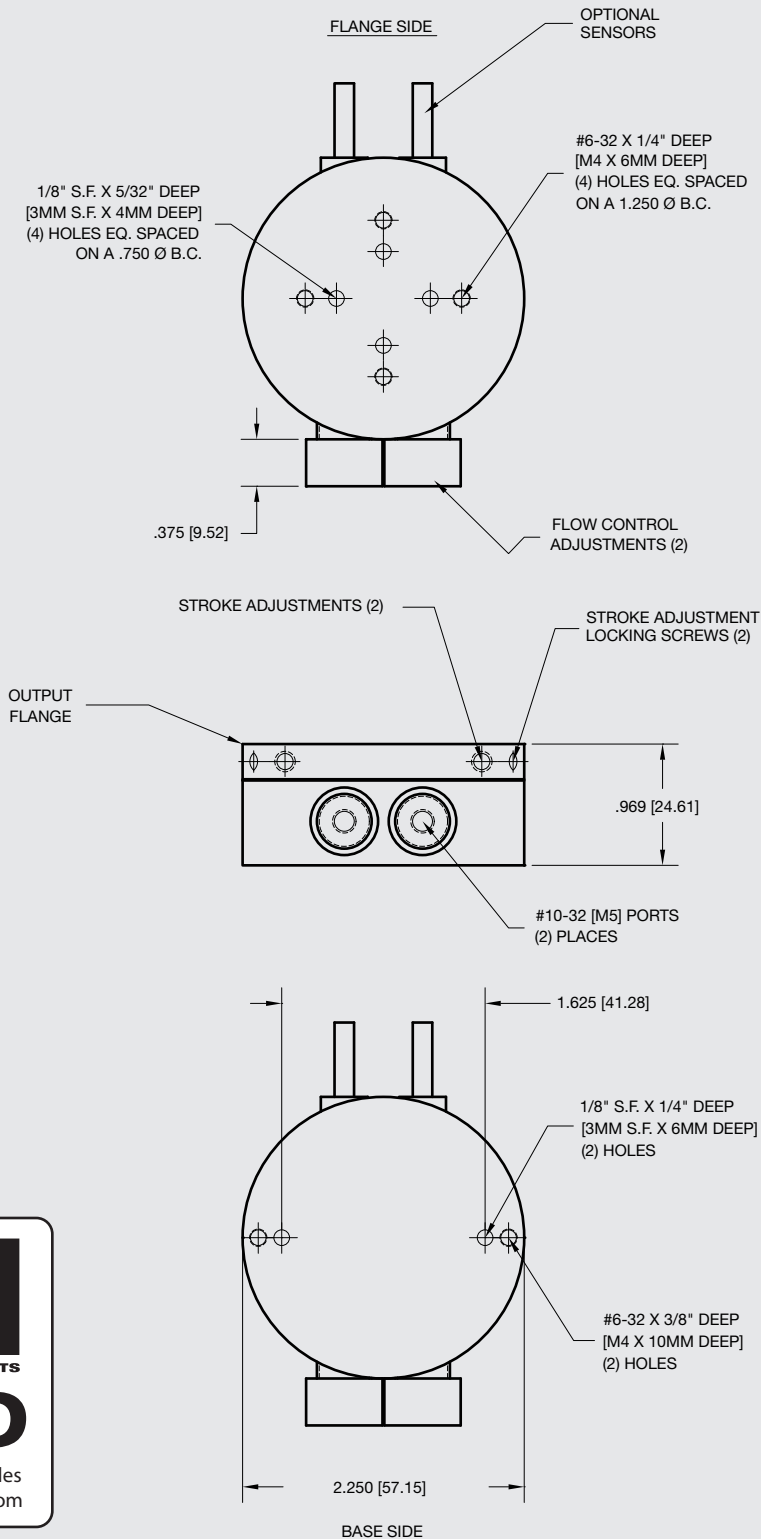


* NOTE: Proximity 4mm dia., 5-24 VDC, 22 mA and comes with 2 meter cable.

Sensor Part # SPC05, SPQ05, SNC05, SNQ05

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Unless noted, all tolerances are as indicated here:



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



Metric Threads Course Pitch

Imperial: 0.00 = ± 0.1
0.000 = ± 0.005
0.0000 = ± 0.0005

Metric: [0.] = ± 0.25
[mm] [0.0] = ± 0.13
[0.00] = ± 0.13