

Automation Products

ACTUATORS



SIMPLIFY ACTUATOR SELECTION

The web-based **Apollo® Actuator Selector** dramatically simplifies the selection of an actuator to fit a specific valve application. Through a series of short questions, the Actuator Selector dynamically responds to your answers providing all the information you need to order the parts you require for your specific application.

Give it a try, visit us on-line at www.apollovalves.com and click on the Actuation Selector link in the Apollo Automation Products page.

APOLLO® PNEUMATIC ACTUATORS OVERVIEW

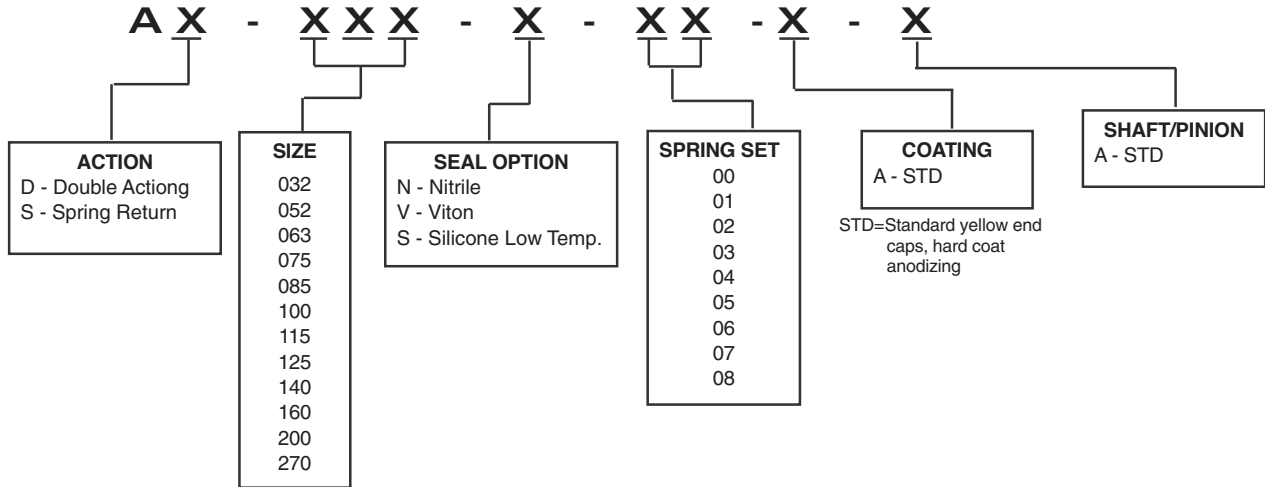
Apollo® actuators are the most advanced rack and pinion actuators on the market today. From corrosion protection to versatility in application, these actuators offer you the ultimate in design and selection. Their outstanding design starts with hard anodized aluminum construction.

The actuators' internal porting reduces the cost of external tubing which can be easily damaged. All top mounting dimensions for accessory mounting and pneumatic supply ports conform to the latest NAMUR specifications.

FEATURES

- **NOMINAL VALUES:**
 - Pressure rating max 115 PSI
 - Temperature range: standard (-4°F;+185°F), high (-4°F;+302°F), low (-40°F;+185°F)
 - Pre lubricated for life of actuator on assembly
 - 100% tested
- **ROTATION ADJUSTMENT 0-90°:**
 - From MOD. 52 up to 140
 - standard $\pm 5^\circ$ in both clockwise and counterclockwise direction by means of adjusting screws outside the internal air supply chambers
 - adjusting cam with plane faces for manual intervention
 - standard optic position indicators
 - MOD. 160-200-270
 - standard $\pm 5^\circ$ in counterclockwise direction by means of adjusting screws in the caps
 - kit for $\pm 5^\circ$ in clockwise direction available on request
- **DIE CAST ALUMINIUM END CAPS:**
 - Standard polyester powder coated
- **CONCENTRIC SPRING SETS:**
 - Standard treatment phosphated
 - High resistance and reliability
 - Spring sets to suit different air pressure/ torque requirements
 - Long securing screws to allow safe dismantling for maintenance
 - Same body dimensions for DA/SR versions
- **ASSEMBLING SCREW:**
 - Stainless steel as standard
- **EXTERNAL CONNECTION:**
 - Top of pinion according to Namur norm
 - Solenoid valve connection according to Namur norm
 - Bottom of pinion according to ISO 5211-DIN 3337
- **HIGH STRENGTH STEEL PINION:**
 - Nickel-plated for standard version protects against internal and external corrosion
 - Anti-blow out design
- **BODY MANUFACTURED FROM EXTRUDED ALUMINIUM UNI 6060:**
 - hard-coat anodized as standard finish 45-50 (micron)
 - Good wear resistance
 - High corrosion resistance
 - Bore finished to high standard to ensure low friction and long life
- **PISTON GUIDES IN POM:**
 - Large contact area
 - Low friction self lubricating material
 - Long life
- **SEALS:**
 - NBR standard version
 - Viton high temperature version
 - SILICON low temperature version
- **PISTONS MADE FROM DIE CAST ALUMINIUM**
- **TWIN RACK AND PINION DESIGN:**
 - Constant torque output
 - Compact design
 - Balanced internal forces
 - Robust design to ensure long life

APOLLO ACTUATOR NUMBERING SYSTEM



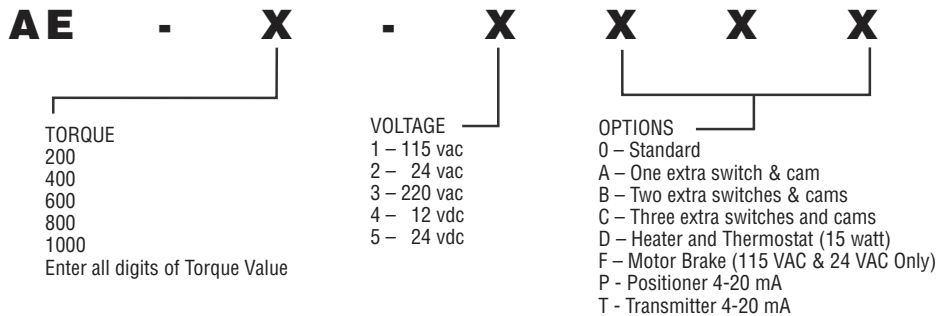
AE SERIES

APOLLO® AE SERIES ELECTRIC ACTUATORS

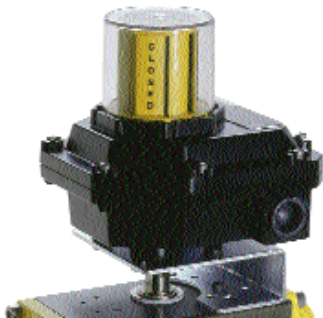
Ruggedly built and designed for easy installation, new Apollo® AE Series electric actuators deliver the most standard features and performance in their class – for a surprisingly low price. Five output torques, one housing 200, 400, 600, 800 and 1,000 inch-pounds.

FEATURES

- Long Service Life
- Newly developed anodized die cast aluminum housing
- Fiberglass reinforced nylon cover with UV stabilizers resists corrosion
- Nitrile gasket and seals cover all penetration points in housing and cover
- Precision cut and heat treated alloy spur gears
- Permanently lubricated enclosed gear train
- Stainless steel push-and-turn manual override shaft, position indicator shaft and female output
- ISO 5211 F07 drive output reduces inventory of mounting kits
- 115 AC, 220 AC and 24 AC -- all AC models feature a 25% duty cycle below 100°F
- 12 and 24 DC -- all DC voltage models provide 100% duty cycle for 1 hour after which DC motor is reduced to 80% duty cycle
- Operates from -40°F (when equipped with heater and thermostat) to 150°F
- Actuators can be ordered with one, two or three additional limit switches
- For low temperatures: actuators can be equipped with a thermostatically controlled heater element
- Motor brake is necessary when mounting actuator to a butterfly valve

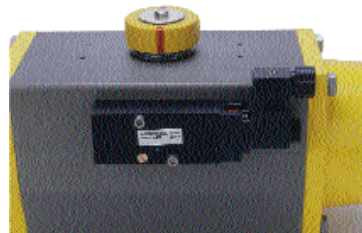


Accessory Products



VALVE POSITION MONITORS

Here's the ultimate in valve monitoring: Position monitors feature a high visibility, color-coded indicator to display valve position. All monitors are designed to correspond to the latest NAMUR standard for actuator/position monitoring units. Plated steel or stainless steel mounting kits are available to provide a pre-engineered mounting solution for maximizing position monitor performance and direct mounting to actuators. Other brands also available. See our Actuator Catalog for details.



SOLENOIDS

Apollo® actuators can be supplied with solenoids manufactured by AVC (Automatic Valve Company). Our 3/4 way, field convertible, direct mount (NAMUR pattern) solenoid valves feature a variety of interchangeable integrated molded coils. They're compatible with both spring return and double acting actuators.



POSITIONERS

Apollo valve positioners are excellent tools for increasing the gain of your valve package, often reducing your actuator size due to your increased ability to accurately control higher air deliveries, and the flexibility to add options and accessories to complete your control package's performance.

Their simple design makes PMV positioners (shown here) easy to understand, calibrate and repair. Rugged construction provides operation in a variety of tough applications. Compact size minimizes space requirements. A complete package means the user can select the right positioner for his application. A bright indicator makes it easy for operators to visually check the valve position. Spool valve design requires very little maintenance. The electro-pneumatic unit eliminates the need for an extra product and additional connections. PMV positioners are proven products recognized for providing years of reliable service. Other brands are also available from your Apollo distributor.

Apollo offers both pneumatic and electro-pneumatic positioners as standard. Pneumatic positioners may be used on either double acting or spring return actuators. The anodized aluminum housing provides excellent product integrity and good corrosion resistance. Options include special coatings, stainless steel housings and a variety of accessory items which can help you meet your most demanding control applications. See our Actuator Catalog for complete details.