

# Automation Products



## Actuators and Manual Operators

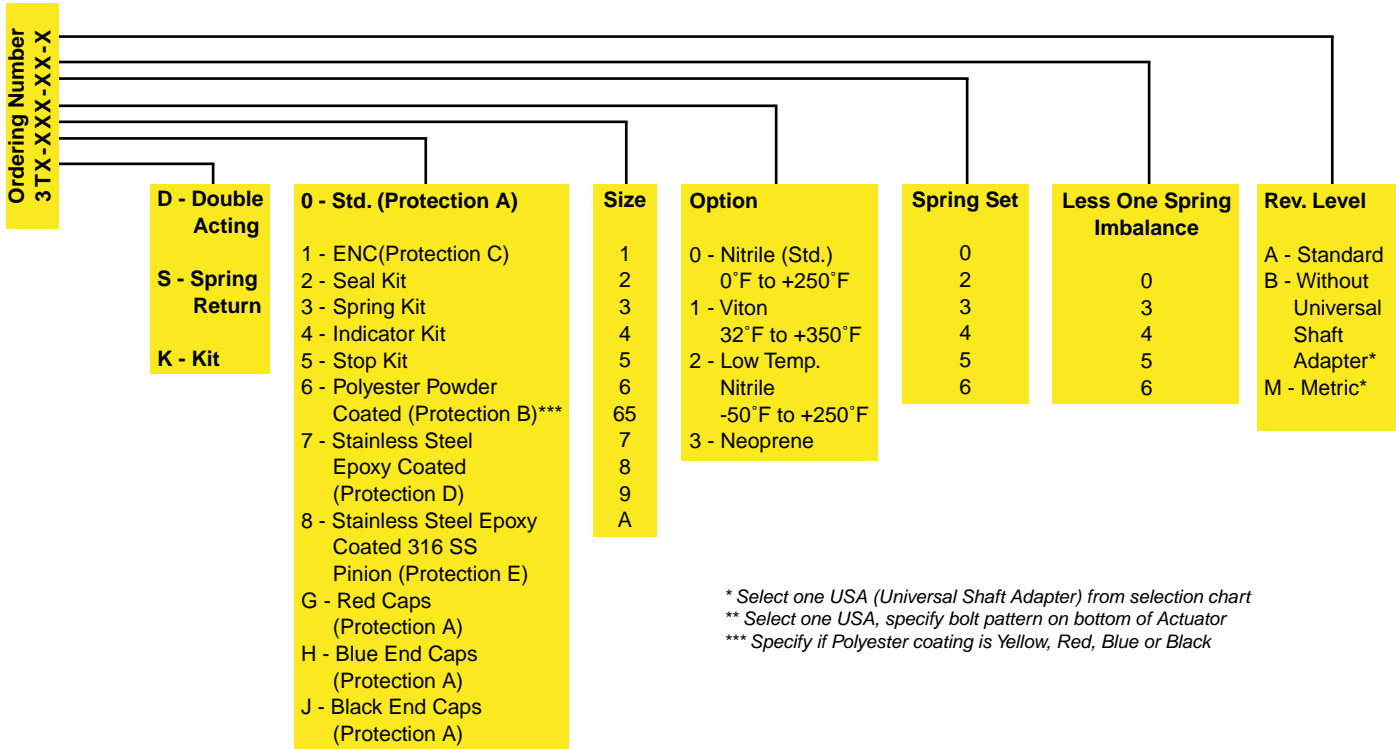
### Apollo® CompacTorque™ Pneumatic Actuators Overview

Apollo® CompacTorque™ 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, in your choice of polyester powder coatings, 316L stainless steel pigmented polyester electrostatic coating or electroless nickel coating. This range of materials assures you the maximum in corrosion protection at an affordable cost. Our unique Universal Shaft Adapter (USA) makes direct mounting to your favorite butterfly valve easier than ever. The precision replaceable inserts feature variable internal geometry to meet any custom requirements. The standard insert material is high-strength FLNC-4408. Optional stainless steel inserts are available. CompacTorque™ actuators are available in spring return or double-acting units which convert easily in the field to a spring return design by simply adding the correct number of pre-loaded springs to the standard housing. Specially designed spring cartridges make our spring return actuators inherently safe. Other standard features include internal and external travel stop adjustments, high temperature, low coefficient of friction body bearings to absorb the side thrust of the pistons, internal piston guides and high temperature, low friction piston bearings.

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. Actuators can be direct mounted to 1-1/2" to 24" Apollo valves. The standard spring cartridge system is designed to operate on 40, 60, 80, 100 and 120 PSI service.



- External end of travel adjustments integral with the end caps
- Mechanical visual position indicator and the pinion is designed to allow manual override by simply removing the position indicator
- One piece output pinion manufactured of high strength steel and electroless nickel coated for corrosion protection
- NAMUR slotted connection
- Replaceable splined adapter to accommodate custom shaft connections
- Pistons and pinion that have a Nylon 4-6 bearing pad and rings, which extends the life of the actuator and reduces friction
- Corrosion resistant polyester powder coated end caps
- Hard anodized aluminum housing
- All fasteners are high strength stainless steel
- Permanently lubricated nitrile seals
- Self-contained spring cartridges, heat treated and polyester powder coated for corrosion protection, that ensure safe disassembly



\* Select one USA (Universal Shaft Adapter) from selection chart  
 \*\* Select one USA, specify bolt pattern on bottom of Actuator  
 \*\*\* Specify if Polyester coating is Yellow, Red, Blue or Black

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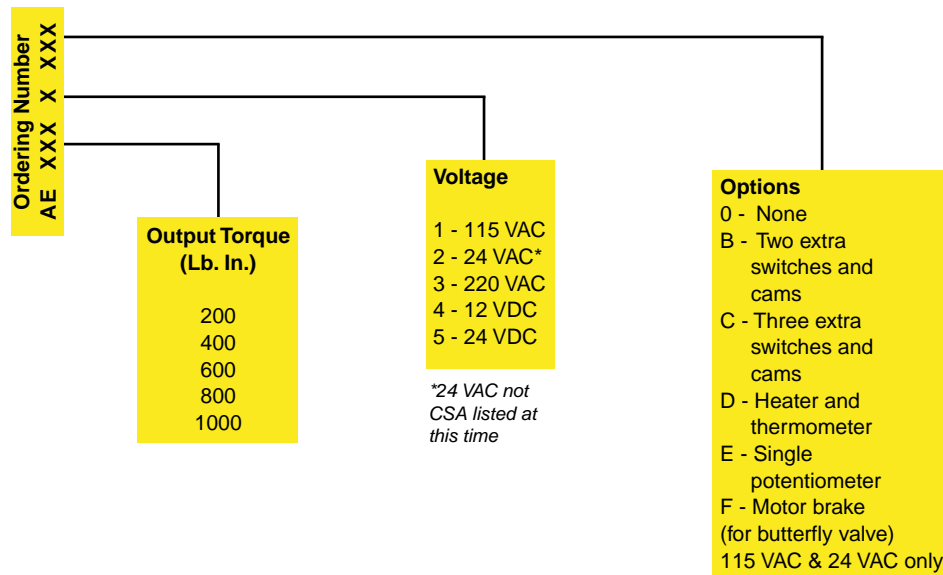
## AE Series

### 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.



- 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
- 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

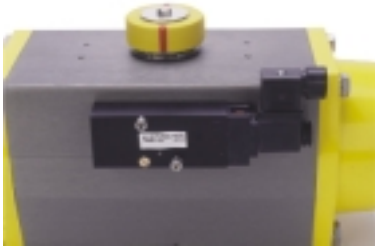


### AE Series



#### Valve Position Monitor

Here's the ultimate in valve monitoring: Westlock and Stonel position monitors feature a high visibility, color-coded indicator to display valve position. All Westlock and Stonel 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 such as Moniteur, pictured here. See our Actuator Catalog for details.



#### Solenoids

Apollo® CompacTorque™ actuators can be supplied with solenoids manufactured by either AVC (Automatic Valve Company) or ASCO. 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.