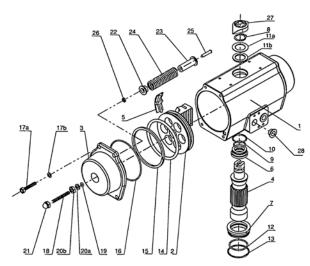
# **ACTUATORS AND CONTROLS**

# Features – "Acutorque" Stainless Steel Actuator



### **CORROSION RESISTANCE**

All metal components are cast or machined from Stainless Steel or Monel, which offers excellent resistance to most corrosive chemicals as well as industrial atmospheres.

# **NO LUBRICATION**

All actuators are factory lubricated for the optimum life of the actuator under normal conditions. Teflon<sup>®</sup> piston bearings are used because of their self-lubricating properties.

SIMPLE MAINTENANCE

Each actuator is designed for ease of maintenance. Should you wish to change a spring rating or completely rebuild a unit, total disassembly and reassembly is easily performed in just minutes with standard shop tools.

ISO/NAMUR MOUNTING By using ISO/Namur standards

By using ISO/Namur standards, our actuators lend themselves to a host of various manufacturers' direct mount accessories. Solenoid valves, limit switches, positioners, etc. bolt directly to the actuator and in turn reduces the cost of assembly and installation of automated packages. Flexibility for future system modifications is greatly enhanced.

## QUALITY

Each part of the actuator must pass a stringent quality test before it can be incorporated into an assembly. All materials used in construction must be certified and tested to prove their proper composition. Every cast part must pass an X-ray test before proceeding to the machining process. After machining, every part is dimensionally evaluated to assure it meets acceptable tolerance.

#### SAFETY

All actuator bodies and end caps are investment cast stainless steel, rugged and built to last. It may be argued that the mechanical properties of stainless steel permit the ability to use this wall tubing in the construction of an actuator. However, that is not the case with our actuator. Thick wall castings mean protection for actuator internal porting and components as well as maintenance and operating personnel. Our unique drive pinion design ensures blowout proof protection. Spring retainers are incorporated to allow safe removal of end caps during spring torque rating change or rebuild process.

|     | Part                   | Qty | Material             |  |  |
|-----|------------------------|-----|----------------------|--|--|
| 1   | Body                   | 1   | 304 Stainless Steel  |  |  |
| 2   | Piston                 | 2   | 303 Stainless Steel  |  |  |
| 3   | End Caps-Double Acting | 2   | Stainless Steel      |  |  |
| 4   | Drive Pinion           | 1   | 17-4 Stainless Steel |  |  |
| 5   | Guide Bearing Plate    | 2   | Nylon 6              |  |  |
| 6   | Pinion Bearing Top     | 1   | Teflon               |  |  |
| 7   | Pinion Bearing Bottom  | 1   | Teflon               |  |  |
| 8   | Snap Ring              | 1   | Stainless Steel      |  |  |
| 9   | O-Ring-Inner Top       | 1   | Viton                |  |  |
| 10  | O-Ring-Outer Top       | 1   | Viton                |  |  |
| 11a | Washer                 | 1   | Stainless Steel      |  |  |
| 11b | Bearing                | 1   | Nylon 6              |  |  |
| 12  | O-Ring-Inner Bottom    | 1   | Viton                |  |  |
| 13  | 0-Ringer-Outer Bottom  | 1   | Viton                |  |  |
| 14  | 0-Ring-Piston          | 2   | Viton                |  |  |
| 15  | Bearing-Piston         | 2   | Nylon 6              |  |  |

304

303

18-8

17-4 ph

| Part |                       | Qty | Material        |
|------|-----------------------|-----|-----------------|
| 16   | 0-Ring-End Cap        | 2   | Nitrile         |
| 17a  | Bolts-End Cap         | 8   | Stainless Steel |
| 17b  | Spring Bearing        | 8   | Stainless Steel |
| 18   | Adjusting Travel Stop | 2   | Stainless Steel |
| 19   | O-Ring-Travel Stop    | 2   | Nitrile         |
| 20a  | Washer                | 2   | Stainless Steel |
| 20b  | Nut-Travel Stop       | 2   | Stainless Steel |
| 21   | End Nut-Travel        | 2   | Stainless Steel |
| 22   | Spring Retainer (S)   | *   | Nylon 6         |
| 23   | Spring Retainer (L)   | *   | Nylon 6         |
| 24   | Spring                | *   | Plated CS       |
| 25   | Spring Screw          | *   | Stainless Steel |
| 26   | Spring Nut            | *   | Stainless Steel |
| 27   | Positioner Indicator  | 1   | Nylon           |
| 28   | Plug                  | 2   | Nylon 6         |

#### **GRADE OF STAINLESS STEEL**

Body & End Caps

Shaft

Piston

Bolts

| Analla | /<br>Valves     |
|--------|-----------------|
|        | vaives          |
|        | Made In The USA |
|        |                 |

For additional information, submittal sheets and manuals, visit www.apollovalves.com