Pneumatic rotary actuators – Installation and maintenance Instruction



1. Lubrication

Moving parts are factory lubricated for life cycle. However, under continuous operation and arduous environmental conditions re-lubrication may be required.

2. Supply

Filtered dry or lubricated air, non-corrosive gas, water and light hydraulic oil can be used.

3. Hand controls

When fully de-pressurized the actuators can be operated by hand levers or gearboxes for emergency operation.

4. Installation

The actuators can be mounted in any position. Before mounting the actuators on the valve, make sure that the actuator shaft and the valve shaft are aligned properly to avoid any friction.

5. Maintenance (See Attached Drawing)

Important: before dismantling make sure that air supply and all electrical connections have been disconnected.

- A. Remove end bolts (10) from end cap (3).
- B. Take off end caps (3).
- C. Turn pinion (4) counter clockwise so that pistons (2) move out of the body.
- D. Remove circlip (10) from pinion (4).
- E. Remove the pinion (4) from the lower part of the body by simply finger pressing from above.
- F. Replace following parts as necessary:

On the pistons (2)

- **i.** Piston "O" rings (21)
- ii. Nylon guide rings (20) On the end caps (3)
- i. End cap "O" rings (19) On the pinion (4)
- i. Pinion "O" rings (7 & 9)
- ii. Guide rings (6 & 8)

Internal parts (cylinder, pinion and guide rings) have to be lubricated with a quality grade grease compatible with standard Buna or low-temp Buna O-rings.

Code for spare parts identification NBRE

SP = spare part \square = Drawing Item NBR \square = Actuator Model Example: P/N for upper pinion o-ring to suit AP4.5 = SP-9-AP4.5.