1.0 General safety information

This document should be read alongside the Installation and Maintenance Instructions (IM-P373-05) supplied with the original product, and should be treated as a supplement sheet to the afore mentioned.

2.0 Stem seal replacement:

- Isolate the upstream and downstream valves.
- Vent the pilot pressure from the actuator and disconnect the pilot pipework/solenoid valve.
- Remove the piston actuated valve from the pipeline.
- Remove the valve body. **Caution:** Before removing the valve body on normally closed valves, the spring pressure acting down onto the valve head seal should be relaxed to prevent damage. This can be carried out in one of two ways:
  1. Undo the actuator cover to relax the spring force while retaining the valve body and then remove the actuator and valve stem.
  2. Apply air pressure at the inlet port of the actuator, which will compress the spring and remove the downward force, then remove the actuator and valve stem.
To replace the main stem seals, remove the actuator housing cover whilst holding the valve body firmly. **Warning: The internal spring is under compression.** Remove the valve body.

- Whilst holding the valve head securely, unscrew the red travel indicator and stem lock-nut then remove complete with the two washers.
- Remove the piston, stem '0' ring and washer along with the spring and valve stem.
- Remove the piston housing securing nut, whilst holding the bonnet in a secure position.
- Replace as required the stem sealing kit.
- Clean out any dirt or waste deposits from inside the piston housing area and carefully apply Viton compatible inert grease to the '0' ring and piston lip seal.
- Reassemble in reverse order referring to the drawings showing correct location of components, see Figure 4 and torque settings (page 10 of IM-P373-05).

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**Fig. 2**
Stem seal kit for Types PF5 and PF6 piston actuated valves with Type 1 actuator (INC-BD-NO)

**Fig. 3**
Stem seal kit for Type PF6 piston actuated valves with Types 2 and 3 actuator (2NC-NO-BD and 3NC-NO-BD) - Stainless steel only
NC (Normally Closed) valves

- Red travel indicator
- Stem lock-nut
- Washer
- Piston
- Stem 'O' ring
- Washer
- Spring washer
- Spring
- Piston lip seal
- Piston
- Valve stem

NO (Normally Open) valves

- Red travel indicator
- Stem lock-nut
- Piston
- Spring washer
- Stem 'O' ring
- Spring
- Piston lip seal
- Washer
- Valve stem

BD (Bi-Directional normally closed) valves

- Valve stem
- Valve head seal (PTFE)
- Type PF6_G
  - Body seal
  - Body 'O' ring
  - Valve body
- Type PF51G
  - Body seal
  - Valve body

Fig. 4