spirax /sarco

IM-S24-32

CH Issue 1

Replacing Chevron Seals with Graphite Packing Set

Installation and Maintenance Instructions

1. Safety information

Prior to working on the valve and actuator assembly it is important the correct safety precautions are followed. Refer to the product Installation and Maintenance Instructions for guidance.

2. Application

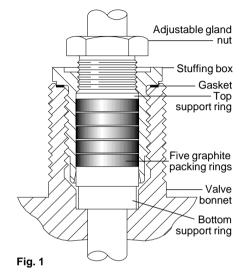
The following graphite packing sets are available and can be fitted to the KE, KEA, LE and QL valves as described below:-

DN15 to DN50 graphite packing set for DN15 to DN50 KE, KEA, LE and QL valves

DN65 to DN100 graphite packing set for DN65 to DN100 KE, KEA, LE and QL valves

3. Fitting of the graphite packing set

- a) Isolate valve on all sides.
- b) Remove the actuator from the valve. Refer to the actuator Installation and Maintenance Instructions covering Spirax Sarco actuators.
- c) Remove existing stuffing box and packing. Remove PTFE, guide bush and spring.
- d) Examine all parts for signs of damage or deterioration and renew as necessary. Ensure the valve stem is free of score marks or scaly deposits as this will lead to early failure of the seals.
- e) During fitting the order of the graphite pack should be maintained as supplied. This can be seen in Figure 1.
- f) Place the stuffing box gasket into the bonnet recess. Pass bottom support ring over stem (note orientation).
- g) Lubricate the valve stem liberally with silicone grease e.g. (Rocol Sapphire Aquasil MX22)
 h) Carefully pass the stuffing box assembly
- h) Carefully pass the stuffing box assembly over the stem until the thread engages.
- Screw the stuffing box into the valve bonnet with the correct torque (DN15 to DN50 25 - 30 N m. DN65 to DN100 32 - 38 N m).
- j) Screw down the gland nut until it contacts the top support ring and begins to compress the graphite packing. Proceed to tighten a further ½ turn.



- k) Raise and lower the valve stem a minimum of 5 times to bed the seals in.
- I) If the stroke action is stiff apply more silicone grease to the exposed valve stem.
- m) Refit the actuator using the clamping nut and connect the actuator to the stem.
- n) Stroke the valve a further 5 times to ensure smooth operation.
- O) Commission the actuator as described in the actuator Installation and Maintenance Instruction.
- p) Bring the valve back into service. Refer to the valve Installation and Maintenance Instructions for any further guidance
- q) Should there be any small seepage from the valve stem then the gland nut can be carefully tightened. It is important to note that over tightening of the gland nut may adversely affect the operation of the valve.