# S200

## Commissioning Instructions



### **INSTALLATION CONDITIONS**

Body pressure range: 0 - 19 Bar

(0 - 16 Bar for units with flanges to BS EN 1092-2 NP 16)

Temperature range: -20°C to +80 °C

#### **OPERATING INSTRUCTIONS**

- Ensure that this product is suitable for the chosen application.
- Installation, adjustment and maintenance by authorised, trained personnel only.
- When being fitted to an appliance, refer to the appliance manufacturers instructions.
- Ensure that the installation provides adequate protection to prevent over pressurisation.
- Traffic, wind and earthquake loadings should be considered when specifying the installation.

Warning! Incorrect installation, adjustment, modification, operation and maintenance may cause injury or damage.

Read the instructions before use. This control must be installed in accordance with the rules in

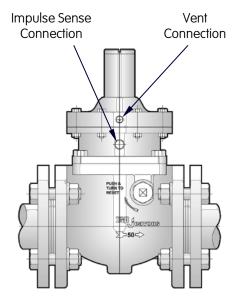


Fig. 1

### FITTING UNITS INTO PIPEWORK. Fig. 1

- The unit should not be installed in a corrosive environment.
- 2. The ambient temperature (surface temperature) should be within the limits stated on the slam shut valve catalogue.
- 3. Check the maximum allowable pressure on the slam shut valve nameplate against the installation specification.
- 4. Remove protective discs from flanges on inlet and outlet ports.
- 5. Ensure installation pipework is thoroughly clean.
- 6. The direction of gas flow must be the same as the arrows on the slam shut body.
- 7. Install the slam shut valve into the pipework, using gaskets and bolting approved to National Standards.
- 8. Connect impulse line to sense chamber tapping, using jointing compound approved to National Standards.
- 9. Vent line can be installed as below if required:
- 10. Remove vent protective screen and connect vent pipe line to top cover, using jointing compound approved to National Standards.
- 11. Lead pipe to atmosphere in accordance with National Standards.
- 12. Ensure no water can penetrate pipe termination point.

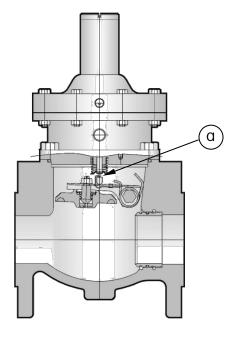


Fig. 2

## VALVE OPERATION (Fig 2)

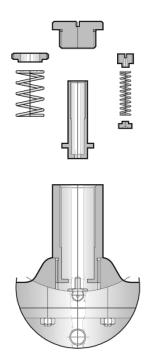
As the sense pressure reaches the desired trip point it acts against the pressure sensing diaphragm and OPSS or UPSS pressure setting spring.

The bearing cage is lifted for OPSS or falls for UPSS allowing the ball bearings to move radially outwards against the bearing cage taper to a point where the shoulder diameter on the spring loaded shaft is free to pass through the bearings (TRIP POINT).

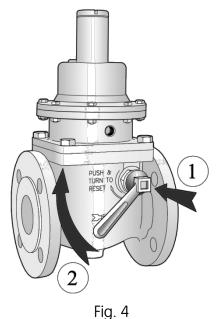
As the shaft moves through the bearings it releases the spring clip (a) thereby allowing the valve disc assembly to operate to the closed position.

If fitted the valve position indicator indicates that the valve has moved to the closed position.

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### SETTING THE TRIP PRESSURES (Fig 3)

- Ensure valve is depressurised.
- 2. Remove top cap.
- Using a flat blade screwdriver turn the outer OPSS adjusting bush clockwise (+) to increase loading on OPSS spring to maximum.
- Screw inner UPSS adjusting bush anti-clockwise to reduce loading on UPSS spring, making sure that adjusting bush does not protrude from bushing quide.
- Introduce desired OPSS set pressure at pressure sense point.
- Re-arm valve (see below).
- Wind OPSS adjusting bush anti-clockwise nut half a turn at a time until valve
- 8. Remove pressure, reset valve (see below).
- Slowly introduce pressure at sense point, and check that OPSS trips at desired pressure. Adjust as necessary.

NOTE: OPSS is now set.

- 10. Introduce desired UPSS set pressure at pressure sense point.
- 11. Re-arm valve (see below).
- 12. Wind UPSS adjusting bush clockwise half a turn at a time until valve trips.
- 13. Increase pressure to between OPSS and UPSS settings and reset valve (see below).
- 14. Slowly reduce pressure at sense point, and check that UPSS trips at desired pressure. Adjust as necessary.

NOTE: UPSS is now set.

- 15. Refit top cap.
- 16. NOTE; if correct trip pressures can not be obtained, choose correct spring from tables in catalogue, substitute for springs fitted and go back to instruction 3 above.

### RE-ARMING THE VALVE (Fig 4)

Re-arming of the valve is carried out manually. Prior to re-arming, the cause of operation should first be ascertained and rectified. The valve must be isolated and downstream pressure vented. In order to operate the correct procedure must be followed.

The reset shaft requires to be pushed and rotated (1) until it is felt to engage the latching assembly. Further rotation using light pressure causes the automatic equalizing valve to operate.

Do not attempt to force the valve open. Once pressure has equalised and the impulse pressure has risen to a point between OPSS and UPSS set points, the valve seat assembly will be felt to lift from the seat allowing the reset shaft to be easily rotated (2) to the latching position.

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