S100
Commissioning Instructions

INSTALLATION CONDITIONS

Body pressure range: 0 - 19 Bar

(0 – 16 Bar for units with flanges to BS EN 1092-2 NP16)

Temperature range: -20ºC to +80 ºC

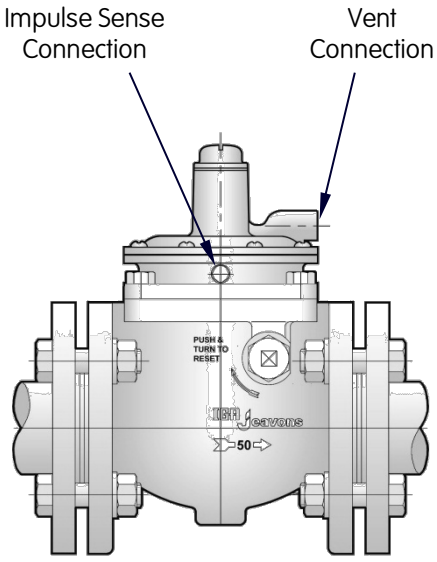

Fig. 1

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 force.

FITTING UNITS INTO PIPEWORK. Fig. 1

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.

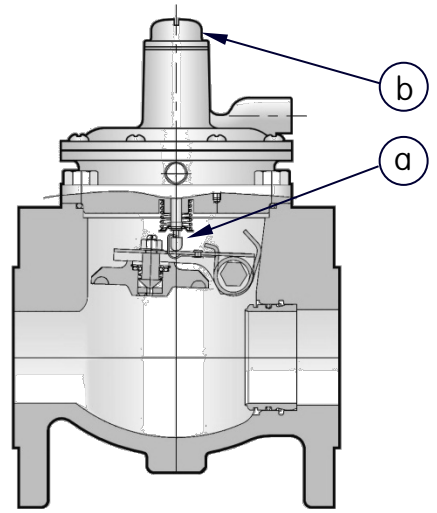

Fig. 2

VALVE OPERATION (Fig 2)

As the sense pressure rises to the desired trip point, it acts against the pressure sensing diaphragm and pressure setting spring.

A bearing cage is lifted, allowing 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 seat assembly to operate in the closed position.

A valve position indicator (b) indicates that the valve has moved to the closed position.

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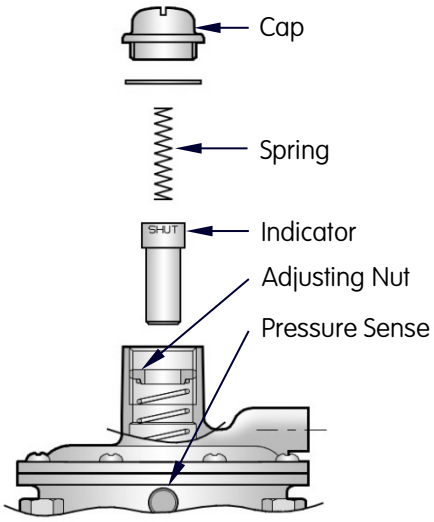

Fig. 3

SETTING THE TRIP PRESSURE (Fig 3)

1. Ensure valve is depressurized.
2. Remove cap, spring and indicator.
3. Screw adjusting nut clockwise as far as it will go, Do Not Force.
4. Induce desired set pressure at pressure sense point.
5. Wind out (anti-clockwise) adjusting nut half a turn at a time until valve trips.
6. Remove pressure, reset valve (see below).
7. Slowly induce pressure at sense point, and check that valve trips at desired pressure. Adjust as necessary.
8. Valve is now set.
9. Refit indicator, spring and cap.

   NOTE; if correct trip pressure is not obtainable, choose correct spring from tables on page 13, and go back to instruction 3 above The unit should not be installed in a corrosive environment.

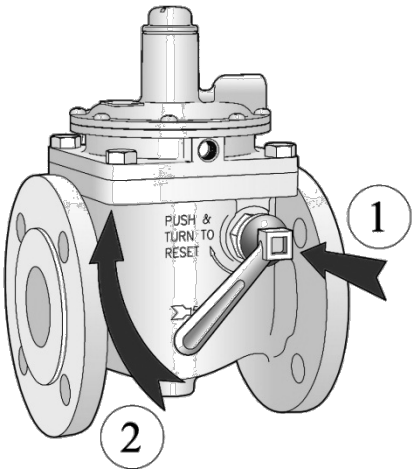

Fig. 4

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 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.

When the valve is satisfactorily re-armed the valve position indicator will move from the window ((b) Fig 2).

Contacts

United Kingdom
Elster Jeavons
Paton Drive, Tollgate Business Park,
Beaconside, Stafford, Staffs ST16 3EF
T +44 1785 275200
F +44 1785 275305
www.elster-instomet.com
info.jeavons@gb.elster.com

Germany
Elster GmbH
Steinern Str. 19 - 21
55252 Mainz-Kastel
T +49 6134 605 0
F +49 6134 605 223
www.elster-instromet.com
info@elster-instromet.com

USA
Elster American Meter
2221 Industrial Road
Nebraska City, NE 68410-6889
T +1 402 873 8200
F +1 402 873 7616
www.elster-meterservices.com

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