

# **FITTING GUIDE FOR VRG131 DZR ROTARY VALVE.**



## **ESTABLISH PORTING CONFIGURATIONS.**

1. Look at Fig.1 & 2 and decide which port will always be open, this is your common port, (in Fig.1 this is the triangle in Fig. 2 this is the square). (square, triangle & circle are marked on the valve body) NB Flow direction can be reversed.  
N.B. If the circle is your always open/common port then you will need to use a VRG230 series ( please contact the office for advice)
2. The stem (black plastic with internal brass thread) has four drive lugs one of which is slightly scalloped, this indicates the centre of the internal shoe. (See Fig.1).
3. Position the centre of the shoe (as indicated by the scalloped drive lug) midway between the two ports which are required to close/control. As shown in Figs. 1 & 2.
4. If operating manually fit the red indicating ring/manual stop, aligning the middle of the indicator to the scalloped drive lug. Then fit the manual operating knob/indicator over the stem aligning the red line with the scalloped drive lug.
5. If operating electrically with an Esbe series 600 actuator see below.

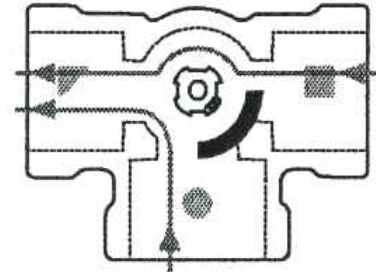


FIG. 1

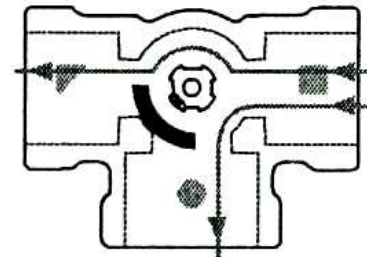


FIG. 2

## **FITTING NEW ELECTRIC ACTUATOR ARA600 SERIES.**

1. Decide which is your porting configuration (see above) and set the valve into mid position as shown either Fig.1 or Fig.2.
2. The Esbe actuator is supplied in the mid position. Do not at this stage put power onto the motor. If power has already been applied or it is an existing actuator see 'fitting existing actuator'.
3. Select the drive coupling (white hexagonal bar), one end has four drive lugs the other end one large drive lug. Fit the four drive lug end onto the black valve stem insuring that the vertical line on the coupling lines up with the scalloped drive lug on the valve stem. (See Fig.1).
4. Remove the actuator manual knob/indicator (black with red line) by lifting upwards. Keep hold of this it will be required later.
5. Fit the actuator over the white drive coupling, the actuator can be fitted in any of four 90° positions inline or across the valve (not diagonally) Ensure the actuator is fully located down onto the black plastic actuator mounting pad (there should only be approximately 2mm gap)
6. If the actuator does not fit snugly re-fit the manual knob, red line mid position. Lift manual knob slightly approximately 5mm showing red ring under black knob (this is manual mode). Then with slight downward force on the actuator move the manual knob 10 degrees clockwise and counter clockwise the actuator should (if not already fully located) drop down a small way onto the valve, this is then fully located. Remove the manual knob.
7. Locate the long securing screw, crosshead with blue mark on thread. Drop this through the middle of the actuator and tighten.
8. Re-fit manual knob, ensure this is fully pushed down with no red ring showing. If any red ring showing turn the manual knob through clockwise and counter clockwise with slight downward force until it aligns with the electrical motor, it should then push down into the auto position (with no red ring showing).
9. Wire according to the wiring instructions provided.

**These instructions are supplied as a guide only and should be used in conjunction with the manufacturers instructions. Any queries please contact the office on 01635 299101.**

# **FITTING GUIDE FOR VRG131 DZR ROTARY VALVE.**



## **FITTING EXISTING ELECTRIC ACTUATOR ARA600 SERIES.**

1. Decide which is your porting configuration (see previous page) and set the valve into mid position as shown either Fig.1 or Fig.2.
3. As the Esbe actuator is an existing actuator it is likely to be in an 'unknown' position. Lift the manual/indicator knob up by approximately 5mm into the manual override position (red ring showing under manual knob). In manual mode move the actuator to the mid position.
4. Select the drive coupling (white hexagonal bar), one end has four drive lugs the other end one large drive lug. Fit the four drive lug end onto the black valve stem insuring that the vertical line on the coupling lines up with the scalloped drive lug on the valve stem. (See Fig.1 previous page).
4. Remove the actuator manual knob/indicator (black with red line) by lifting upwards. Keep hold of this it will be required later.
5. Fit the actuator over the white drive coupling, the actuator can be fitted in any of four 90° positions inline or across the valve (not diagonally) Ensure the actuator is fully located down onto the black plastic actuator mounting pad (there should only be approximately 2mm gap)
6. If the actuator does not fit snugly re-fit the manual knob, red line mid position. Lift manual knob slightly approximately 5mm showing red ring under black knob (this is manual mode). Then with slight downward force on the actuator move the manual knob 10 degrees clockwise and counter clockwise the actuator should (if not already fully located) drop down a small way onto the valve, this is then fully located. Remove the manual knob.
7. Locate the long securing screw, crosshead with blue mark on thread. Drop this through the middle of the actuator and tighten.
8. Re-fit manual knob. We must now re-align the valve position to that of the electrical position of the actuator. Move the manual knob (this will be stiff as you are now moving the valve as well) clockwise and counter clockwise with slight downward force until it aligns with the electrical motor, it should then push down into the auto position (with no red ring showing).
9. Wire according to the wiring instructions provided.

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