

# MANE CONTROLS LIMITED 3 PIECE BALL VALVE

## INSTALLATION OPERATION AND MAINTENANCE MANUAL

### INSTALLATION

Valves, where practical, should be installed so that they can be conveniently operated and gland adjustments readily made.

Do not position valve in such a way as to cause stress on the valve body, connecting pipe work should be adequately supported.

All valves are bagged or fitted with plastic port protectors to prevent damage and ingress of dirt, these should only be removed immediately prior to installation.



Check valve markings to ensure that the pressure rating and materials of construction are suitable for the line in which the valve is to be installed - **IF IN DOUBT ASK.**

If the valve is marked with a direction of flow arrow please ensure it is installed in the correct position.

### OPERATION

The valve is operated manually using handle/lever. The position of the handle acts as an ON/OFF indicator - the direction of the handle relates to the direction of the bore through the ball.

If the valve is fitted with an actuator please see separate instructions to ensure the actuator is functioning correctly.

Do not use excessive force to operate the valve, this could potentially damage the handle and/or stem.

Once the valve is operational, and has reached normal operating conditions, it is advisable to check the stem seal, adjusting the stem nut, if required.

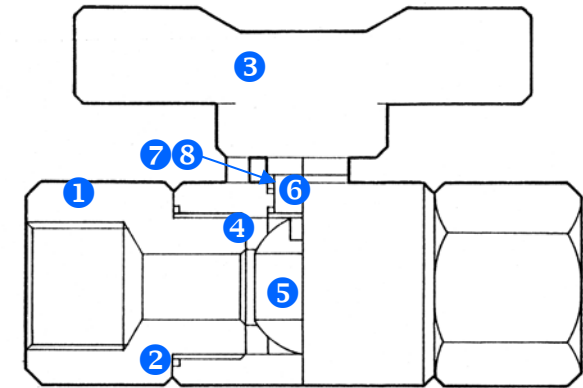
### MAINTENANCE



Under no circumstances should maintenance be attempted while the valve is under pressure. Before attempting maintenance, or removal, check that the line is completely isolated and drained.



Check to ensure that the media contained in the line is not hazardous, if it is please take extra precautions to ensure suitable protective clothing is worn before any work is carried out.



### TO DISMANTLE VALVE

Remove **END CONNECTIONS 1** and **BODY SEALS 2**.

Place **HANDLE 3** in part closed position.

Remove **SEATS 4** taking care not to damage **BALL 5**.

Place **HANDLE 3** in closed position.

Carefully push **BALL 5** out of body.

Remove **HANDLE 3** and **GLAND FOLLOWER 7**.

Carefully push **STEM 6** into body of valve and remove.

Remove **STEM SEALS 8** from gland and **STEM 6**.

### TO REASSEMBLE VALVE

Fit **STEM SEAL 8** onto **STEM 6**.

Replace **STEM 6** from inside body, hold in place and fit **STEM SEALS** and **FOLLOWER 8**, replace **HANDLE 3**.

Tighten stem nut to compress **STEM SEALS 8** into gland. Do not over-tighten as this will create excessive torque.

Place **HANDLE 3** in closed position, replace **BALL 5** and **SEATS 4**.

Replace **BODY SEALS 2** and **END CONNECTIONS 1** and tighten by hand.

Holding body firmly in vice re-tighten **END CONNECTIONS 1** using a torque wrench to 40/45 ft.lbs.

Test valve before re-installing.