

- E. For motorized valve actuators the closing/opening time shall not exceed 0.25 sec/mm , indication with flickering lamp during closing / open operation shall be provided at MCC.
- F. Valves with a size > DN 150 shall be equipped with a drain/vent valve DN 25 at the upstream port unless otherwise specified.
- G. Valve spindle shall be of the non-rising type unless otherwise specified.
- H. Open/close direction shall be indicated at the operation wheels. Plastic hand wheels will not be accepted. All manual operated valves shall be fitted with locking facilities.
- I. For directional valves the flow direction shall be clearly indicated with an arrow on the valve body.
- J. Each valve shall be fitted with a name plate. The name plate shall incorporate the colour code corresponding to the service of the piping, and to the valve asset code, as per AIMS Asset Manual.
- K. The material of valves with accessories and corrosion protection shall be as described for gate valves unless otherwise specified.
- L. Where valves are exposed to outdoor conditions adequate protection covers against dust, sand, etc. for the rotating parts shall be provided.
- M. Valves shall be arranged for convenient operation from appropriate floor level and shall be provided with extension spindles or gearing if necessary. Where extension spindles are fitted, all the thrust when operating the valve shall be taken direct on the valve body and all pedestals necessary shall be mounted directly on the floor.
- N. Full manual or semi manual operated valves installed at a height of more than 2 meter above floor or service level shall be fitted with a chain operated wheel. Valves on horizontal sections of pipe work shall be installed with the spindle vertical. All valves shall be installed to be as accessible as possible.
- O. Valve identification tags shall be wired to all valves.
- P. Air release valves shall be installed at high points in the system as required by the Engineer. Gate valves, air valves and washouts shall be installed as shown on the drawings.

#### **26.4.8 Valve Boxes and Chambers**