



IS 9758 : 1981 – FLUSH VALVES AND FITTINGS FOR WATER CLOSETS AND URINALS

Flush valves and fittings are critical components in water closet and urinal systems. They regulate water flow, ensuring efficient flushing and maintaining hygienic conditions. These devices are available in various configurations, including diaphragm, piston, and electronic sensor-based models, to accommodate diverse operational requirements.

Customers aim for flush valves and fittings that offer reliable performance, efficient water use, and lasting durability. Key quality parameters include robust materials, leak-proof operation, smooth flushing mechanisms, corrosion resistance, and consistent functionality.

IS 9758 outlines the specifications for flush valves and fittings for water closets and urinals, covering **material, size, construction, operational, performance, and testing requirements**.

The flush valves should be constructed from robust materials, including **cast brass for the valve body and steel, PVC, or HDPE for the flush pipe**. Components like washers and springs are made from rubber and phosphor bronze, or stainless steel respectively.

Flush valves shall be of **sizes 15, 25, and 32 mm**, with outlets proportionate to the valve size and capable of **operating under 0.15 to 0.5 MPa pressure**. Each valve is self-closing, non-concussive, and should have a lever or push button for activation, ensuring a controlled discharge rate and efficient water flow.

Operational requirements stipulate that flush **valves discharge** either 5 or 10 liters within 3 seconds, with consistent flush force throughout. Testing involves **hydraulic pressure testing** to withstand 2 MPa without leaks and an **endurance test** of 5,000 operations to ensure reliability, with additional type testing for design or material changes.

The exterior finish requires **bright polishing and chrome plating**, meeting service grade 3 standards of **IS 4827**, to prevent tarnishing. Marking should include the manufacturer's name and valve size.

In summary, IS 9758 ensures the safety, durability, and quality of flush valves and fittings by specifying robust materials, precise operational standards, rigorous testing, and compliance with performance requirements.