



Summary of IS 5290:1993: Landing Valves

Landing valves are critical components in fire protection systems, typically installed in high-rise buildings, industrial facilities, and firefighting systems. They regulate the water flow from the main supply to fire hoses, providing firefighters with accessible water sources to combat fires effectively. Landing valves are usually designed to withstand high pressure and are made from durable materials like **brass or stainless steel** to ensure reliability during emergencies.

Consumers expect landing valves to meet several key quality parameters to ensure reliable performance in emergencies. These include **high-pressure resistance**, allowing valves to withstand intense water pressure without leakage. **Corrosion resistance**, provided by durable materials like brass or stainless steel, extends the valve's lifespan, particularly in humid environments. Ease of operation is essential, with smooth mechanisms for quick activation without additional tools. Precise water flow control is critical for effective firefighting, while durability ensures the valve performs well under frequent use and harsh conditions. A leak-proof design prevents wastage, and compliance with fire safety standards guarantees reliability and safety during emergencies.

IS 5290:1993 specifies the requirements for landing valves (internal hydrants) used in wet hydrant systems within buildings for firefighting. It covers two types: **single outlet (Type A) and double outlet (Type B)**. The standard outlines materials such as leaded-tin-bronze, aluminum alloy, or stainless steel, with specific grades. It also prescribes dimensions and performance tests like **water tightness for valve, hydrostatic pressure test, and flow rate**. The standard also defines valve finishes for corrosion resistance and visibility, along with marking requirements for manufacturer details and certification purposes.