



Summary of IS 13095: 2020 - Butterfly Valves for General Purposes

A butterfly valve is a **compact, quarter-turn valve** with a **rotating disc** that controls fluid flow. The disc rotates around a central axis within the pipe, enabling the valve to fully open or close and also modulate flow when partially open. Butterfly valves are widely used across industries, for **water supply, wastewater treatment, and agriculture**.

The optimal functionality of a butterfly valve depends on the correct selection of **parameters** such as **construction, nominal size, and pressure/temperature ratings**. The Standard specifies **face-to-face dimensions, end connection configurations, and seating mechanisms**, along with **shaft design and material composition**. It also defines actuation modes—**manual, pneumatic, hydraulic, and electric**—to ensure adaptability across various operational contexts.

Comprehensive **Performance Testing, Leakage Testing, and Disc Strength Testing** are specified to ensure the valve's **structural resilience, operational reliability, and safety compliance**. To further guarantee that the valve meets **user requirements** and maintains **optimum quality**, the Standard establishes various criteria for **materials and construction**.

This standard covers **double flanged and wafer type** of metal seated, resilient seated **cast iron, ductile iron and carbon steel, stainless steel, aluminium and lined butterfly valves**. Butterfly valves for industrial uses like oil and gas, power, chemical, food, pharmaceutical, marine, defence, and fire services are not covered in the scope of this standard.

It applies to **general-purpose** valves with valves of nominal pressure designations up to and including **4 MPa** and **Class 300** with ends flanged or wafer type valves and for aluminium (pressure die-cast) body wafer valves of Class 125 and nominal pressure designations of 1.0 MPa and 1.6 MPa (size limited up to DN 300), with bodies designed to be accommodated between pipe work flanges in accordance with various Indian Standards for cast iron flanges, Steel pipe flanges and Ductile iron fittings for pressure pipes.