

IS 7079 - Automotive Vehicles-Brakehose Assemblies For Hydraulic Braking Systems Used With Non-Petroleum Base Brake Fluid Specification

The Indian Standard **IS 7079** outlines the specifications for **brake hose assemblies** used in **hydraulic braking systems** of automotive vehicles. These hoses are essential for the safe operation of vehicle brakes, as they transmit the hydraulic pressure required to activate the braking system. Constructed with **synthetic rubber** and reinforced with textile layers, these brake hoses are designed to withstand high pressure and temperature conditions, ensuring durability. Additionally, **corrosion-resistant metal end fittings** provide secure connections, preventing leaks that could compromise braking performance.

Consumers expect brake hoses to have **high durability, leak resistance, reliable, and flexible**. Important performance parameters include **high burst strength, minimal expansion under pressure**, and resistance to environmental factors such as **moisture, temperature fluctuations, and heat**. Moreover, consumers value the assurance that these hoses meet rigorous safety standards to prevent potential brake failures, supporting overall road safety.

The IS 7079:2008 standard addresses these expectations by establishing comprehensive testing protocols and quality criteria that brake hose assemblies must meet. It specifies the necessary **tests for bursting strength, whip tests, and tensile tests**, ensuring that the hoses can withstand the pressures and stresses encountered during operation. The standard also includes guidelines for **material compatibility**, particularly emphasizing the use of rubber compounds that enhance the longevity and reliability of the hoses. Furthermore, it outlines the **marking requirements**, specifically the **HL marking for low expansion hoses** and the **HR marking for regular expansion hoses**. These markings help consumers easily identify the appropriate product for their needs.

By adhering to IS 7079:2008, manufacturers ensure their brake hose assemblies meet the requirement of **quality and safety**, fostering consumer trust in the automotive market. This standard not only supports reliable brake performance but also plays a vital role in **road safety**, serving as a key reference for both manufacturers and consumers.