IS 17814: 2022 Corrugated Metal Flexible Safety Gas Hose Assemblies Specification

Corrugated metal flexible safety gas hose assemblies are designed specifically to safely transport gases under variable pressure and temperature conditions. Comprising a corrugated metal tube—typically made of stainless steel—these hoses offer both flexibility and strength. The corrugated structure enables the hose to absorb vibrations, allow for thermal expansion, and adapt to movement without breaking or cracking, making them suitable for gas supply lines in residential, commercial, and industrial applications. They are commonly used in gas distribution, fuel handling, and HVAC systems.

Consumers seeks durable and reliable **corrugated metal flexible safety gas hose assemblies**, prioritizing high-quality materials like stainless steel to resist corrosion, withstand **high pressures**, and endure **temperature variations** for extended product life. A leak-proof design is critical, as gas safety depends on the hose's **leak resistance**; therefore, rigorous testing is essential to guarantee leak-proof performance. **Flexibility** and a minimal bend radius are also important, allowing the hoses to fit into confined spaces and accommodate movement without kinking or compromising integrity. Additionally, strong **pressure resistance** is necessary to prevent deformation or ruptures, especially in industrial environments where gas pressure can fluctuate. **Thermal and fire resistance** enhance safety in high-temperature or potentially hazardous environments. Lastly, ease of installation is a key consumer expectation, with secure fitting capabilities using standard accessories to simplify setup and minimize installation errors. These quality parameters together ensure gas hose assemblies meet standards for safety, durability, and convenience.

The Indian Standard outlines requirements for **corrugated metal flexible safety gas hose assemblies** for connecting gas appliances in residential and commercial kitchens at a maximum **operating pressure** of 1.0 MPa. It specifies the requirements for materials, fittings, dimensions, and performance, including testing requirements for leak tightness, structural strength, bending, traction, torsion resistance, impact resistance, and corrosion resistance.