

IS 3745:2006 - Yoke type valve connections for small medical gas cylinders — Specification

Many **medicinal gases** are used in medical facilities such as hospitals, medical clinics, healthcare facilities and homecare. It is of primary importance that medicinal gas cylinders be **distinguished** from gas cylinders for industrial use because of their impact on the **patient's life and safety**. The outlet type of the cylinder valve is the key to connecting the **correct medicinal gas** to the corresponding equipment such as respiratory apparatus. The correct choice of cylinder valve could reduce the medicinal gas incidents due to **gas mix-ups**, wrong connections to the gas outlet and so on.

The material specified for the Yoke type valve connections for small medical gas cylinders is such that the same is inert to the gas being stored in the cylinder thus preventing the chemical contamination of the gases being stored.

These types of valves are used for Medical air, Nitrogen & mixture of Nitrogen & Oxygen. In order to avoid accidents due to mishandling of medical gases by the administration of a wrong gas due to connecting the medical gas administering apparatus to a wrong gas cylinder this Indian Standard the risk has been reduced by specifying a **non-interchangeable system of valves** for gas cylinders and anaesthetic apparatus used in medical profession. In order to achieve interchangeability, the Standard specifies **basic dimensions** and **constructional requirements** for valve connections for small medical gas cylinders with a maximum working pressure (filling pressure at 15°C) of 200 bars and specifies the **dimensions** and **positions for the holes** and pins for the outlet connections for medical gases and gas mixtures. A **cycle test** entailing 6000 operations of fully opening