IS 7302:2018 specifies requirements for valve fittings in Self-Contained Breathing Apparatus (SCBA) and Self-Contained Underwater Breathing Apparatus (SCUBA)

Valve fittings in SCBA and SCUBA systems control the flow of breathable air from the tank to the user. These valve fittings are essential in high-pressure gas cylinders used in life-saving breathing equipment, supplying breathable air , oxygen or oxygen/nitrogen mixtures to users in hazardous or underwater environments.

The BIS Standard IS 7302:2018 specifies requirements for valve fittings for use with refillable high pressure cylinders for breathing appratus namely SCBA and SCUBA . This product is under BIS Mandatory Certification.

➢ **Key specification to ensure quality**:

o **Materials**: These valves body shall be forged from wrought or extruded section of brassand comply with the requirements like Tensile strength, Impact strength.

o **Safety Design**: The valves with component are engineered for reliable performance in extreme conditions, ensuring users receive a consistent air supply when required.

➢ **Testing and Compliance:**

To meet IS 7302:2018 standards, valve fittings undergo several tests to verify their functionality, reliability, and safety under extreme conditions. These include:

o **Valve Brust Pressure Tests:** The valves are subjected to high-pressure conditions to confirm they can handle the maximum cylinder pressure without failing.

o **Endurance Testing:** The valves must perform consistently over repeated uses, simulating real-life applications to validate durability.

o **Impact Testing**: This evaluates the valve's resilience to physical shocks or impacts, which could occur during handling or in emergency situations.

This standard guarantees that SCBA and SCUBA valve fittings provide safe, uninterrupted air supply in life-critical situations, offering peace of mind for users and meeting strict safety and performance requirements.

➢ To verify the CM/L number marked on the product, **download the BIS CARE app** from the Play Store.

➢ You may explore further by downloading the standard for free from **https://standardsbis.bsbedge.com/.**