

BIO-MEDICAL ENGINEERING SECTION

Addu Equatorial Hospital

SPECIFICATIONS

Technical Specification for Medical Oxygen flowmeter with humidifier bottle, Air Flowmeter, and Vacuum Regulator with suction jar

1. General Requirements:

The oxygen flowmeter with humidifier bottle, air flowmeter, and vacuum regulator shall be suitable for use in cardiac care units, ensuring safe and reliable operation with respiratory and suction devices, and conforming to international safety and quality standards.

2. Technical Specifications:

Medical Oxygen Flowmeter with Humidifier Bottle:

QTY: 5 Nos

- **Gas Type:** Suitable for medical oxygen, ensuring safe handling and use.
- **Flow Rate:** 0-15 l/min.
- **Oxygen Flowmeter Inlet:** Plug-in type with British Standard (BS) compatibility.
- **Humidifier Bottle Capacity:** Minimum capacity of 250ml for effective humidification.
- **Compatibility:** Should be compatible with oxygen concentrators, CPAP machines, ventilators, and other respiratory equipment.
- **Material:** Made from durable, non-toxic, medical-grade plastic suitable for respiratory use.
- **Barbed Oxygen Connector ('Christmas Tree' Adapter):** Included for easy attachment of oxygen tubing with barbed ends, ensuring a secure and leak-proof connection.
- **Anti-Spill Design:** Designed to prevent leakage or spillage, ensuring continuous and reliable humidification.
- **Refillable and Easy to Clean:** Wide opening for convenient refilling and easy disassembly for cleaning and maintenance.
- **Gas Outlet:** Secure and leak-proof gas outlet to deliver humidified gas to the patient or respiratory equipment.
- **Output Pressure:** 4.5 bar to ensure a consistent and reliable supply of medical-grade oxygen.

Vacuum Regulator with JAR:

QTY: 5 Nos

- **Pressure Range:** 0 to 760 mmHg (0 to 101.3 kPa) or higher, suitable for various medical procedures.
- **Control Mechanism:** Adjustable control knob or dial for precise vacuum pressure regulation.
- **Gauge:** Integrated vacuum gauge for real-time pressure monitoring.
- **Vacuum Inlet and Outlet Connections:** Designed for hospital central vacuum systems
- **Mounting:** Wall-mounted design for accessibility and convenience.
- **Compatibility:** Plugin type with British Standard BS 5682.
- **Materials and Durability:** High-quality ABS-PC body, stainless steel and latex-free construction.

- **Safety Features:** Includes a water trap with overflow protection and a high-efficiency particulate filter or viral bacterial hydrophobic filter.
- **Overflow Protection:** Safety trap with overflow protection and particulate filtration.
- **Suction Jar:** Polysulfone (PSU) autoclavable up to 135°C (275 °F), with coupling for wall support and supplied with a compatible silicone hose.
- **ON/OFF Switch:** Quick control for opening/closing, with an internal pressure relief valve when vacuum gauges are in OFF mode.

QTY: 5 Nos

Air Flowmeter:

- **Air Flowmeter Compatibility:** Should have universal compatibility with Air British Standard (BS) to be used with various medical devices.
- **Flow Rate:** 0-15 l/min.
- **Flowmeter Outlet Connector:** The gas outlet should have a secure and leak-proof connection, meeting the size with hospital gas outlet
- **Barbed Air Connector ('Christmas Tree' Adapter):** Barbed air connector, also known as a 'Christmas tree' adapter, for a secure and leak-proof connection to oxygen tubing with barbed ends.

3. Standards and Certification:

- Humidifier bottle, air flowmeter, and vacuum regulator must be CE certified or comply with ISO or relevant international standards.
- Barbed oxygen and air connectors should meet medical-grade specifications.

4. Additional Requirements:

- Complete product details must be enclosed with the original brochure or catalog.
- The supplier should provide clear details on standard accessories, additional accessories, optional items, consumables, and minimum supplies included.

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