MAGELLAN 2200 MKII Field Anaesthesia System

Field anaesthesia without the need for compressed gas
MAGELLAN Anaesthesia System

Military robustness combined with total mobility and power source flexibility

The Magellan-2200 MKII Anaesthesia Machine is a compact, robust and flexible field anaesthesia system. It is easy to transport and was designed for military forward surgical teams, combat surgical hospitals, general civilian hospitals, outpatient surgical centres, office-based anaesthesia, military and civilian medicine. The system can be powered pneumatically or electrically and is designed to be used with any complete or simple patient monitoring system that the operator prefers to use or has on hand. The machine can be mounted on its custom-made carrying case, especially designed for the unit, or on a tabletop as the operator prefers.

The machine includes a 2 gas oxygen and air flow meter, vaporizer, ventilator with rising bellows system, King circle absorber, oxygen therapy flow meter and a complete set of connecting circuits, all supplied in a military approved case for easy transport and deployment.

Technical Specifications

Possible Gas Supply Sources:

- **Pneumatic**: O₂ Pipeline or Cylinders 38 to 70 psi [2.6 to 4.8 bar] [50 psi nominal (3.5 bar)]
- **Pneumatic/Electronic**: Air and/or Air Compressor 38 to 70 psi [2.6 to 4.8 bar] [50 psi nominal (3.5 bar)] and low flow O₂ [for O₂, flow meter only]
- **Electronic**: Oxygen concentrator (if Available for O₂, flow meter only) Air Compressor 38 to 70 psi [2.6 to 4.8 bar] for ventilator

Items Supplied Follows:

- **Anaesthesia Delivery System**
  - Gas Pressure Hoses (country standard dependant)
  - Gas Inlet Pressure Regulators (for O₂ & Air)
  - Oxygen and Air Supply Gauges
  - High Pressure Oxygen Supply Failure Alarms
  - Low Pressure O₂ Supply Failure Alarm
  - O₂ and Air Flowmeters [calibrated and scaled 0 - 10 Lpm, colour coded]

- **Vaporizer**:
  - Sigma Delta Series, temperature compensated, very low maintenance (user choice of agent)
  - Bellows Unit:
    - upward inflating, range from 0 to 1.6 Lt
  - Oxygen Flush Valve:
    - Functional with high pressure O₂
  - CO₂ Absorber System:
    - King Systems KAB-9 [re-fillable] or KAB-1 [pre-filled/disposable]

- **Ventilator**:
  - Pneumatic Ventilator [compressor or gas driven] time cycled, flow generator pressure limited to 60 cmH₂O
  - Frequency Range: 10 to 30 bpm
  - Minute Volume Range: 4 to 14 L/min
  - I:E Ratio: Nominal 1:1.8
  - Inbuilt alarms: high pressure, Cycle, low pressure disconnect and low battery
  - Gas Supply Indicator: Pneumatic eyeball
  - Airway Pressure Gauge: -10 to 100 cmH₂O

- **Air Compressor**:
  - To power ventilator and air-flow meter. Self contained variable speed compressor offering reduced noise with automatic water purge

- **Power Supply**:
  - Inputs 200/115V AC +22 to 28V DC. Output to 25V DC with charge facility for Ni-Cad batteries Mains AC Supply to Charger lead Charger to system 24V/28V DC Lead Size: 12.5W x 26.8D x 12H cm - weight 3.25kg

- **Battery** (to be used in compressor unit)
  - Clansman Ni-Cad Rechargeable type Output is 24 Volts DC – rated at 4.0 Amp hours NATO stock Number 6140-99-620-8057
  - Size: 20W x 7.5D x 15H cm – weight 3kg.

Dimensions

- Fully packed system in transport case for shipment or storage:
  - Size: 100 x 82 x 59 cm
  - Weight: 64kg

The system has FDA 510 (K) clearance and is CE marked to the Medical Devices Directive