System Chart

- **Filter Connecting Tube** (Included in MAJ-590)
- **Insufflation Tube**
- **Luer-Lock Connector** (Included in MAJ-591)
- **Suction Tube**
- **Y-Shaped Connector**
- **Extension Tube**

- **MAJ-590 Insufflation Tube**
  - Includes tube (transparent) and filter connecting tube
- **MAJ-591 Suction Tube**
  - Includes tube with green line, small diameter tube (transparent), differential diameter connector, Y-shaped connector, extension tube, and small luer-lock connector
- **MAJ-1084 Cylinder Hose (PIN) for UHI-3**
  - Includes hose for cylinder, cap 1, cap 2, wrench (large), and wrench (small)
- **MAJ-1085 Cylinder Hose (DISS) for UHI-3**
  - Includes hose for cylinder, cap 1, cap 2, wrench (large), and wrench (small)
- **MAJ-1081 Cylinder Hose (DIN) for UHI-3**
  - Includes hose for cylinder, cap 1, cap 2, wrench (large), and wrench (small)
- **MAJ-1082 Cylinder Hose (ISO) for UHI-3**
  - Includes hose for cylinder, cap 1, cap 2, wrench (large), and wrench (small)
- **MAJ-594 Medical Gas Pipeline Adaptor (NIST) for UHI-3**
  - Includes hose for medical gas pipeline, cap, and wrench
- **MAJ-595 Medical Gas Pipeline Adaptor (DISS) for UHI-3**
  - Includes hose for medical gas pipeline, cap, and wrench

**Specifications**

- **Applicable gas**
  - CO2 gas for medical use: Connection to medical gas pipeline
- **Abdominal pressure control**
  - Indicators: Digital display, bar graph
  - Settings:
    - Abdominal pressure setting is possible in 1 mmHg increments. For settings of 21 to 25 mmHg, press the abdominal pressure control switch continuously for 3 seconds. Other pressure settings are canceled. Select a pressure setting that is not a multiple of 5 mmHg for safety reasons. Settings of 21 mmHg or higher are saved as 20 mmHg.
- **Flow rate settings**
  - 3 modes:
    - "HIGH" mode: 20 to 35 L/min.
    - "MED" mode: 1.1 to 19 L/min.
    - "LOW" mode: 0.1 to 1.0 L/min.
- **VOLUME indicator**
  - Digital display
    - (0.0 to 19.9 L: 0.1 L steps / 20 to 999 L: 1 L steps)
- **Power requirements**
  - Voltage (AC) 100 - 240 V
  - Frequency: 50/60 Hz
  - Input: 150 VA
  - Voltage fluctuation: Within ±10%
- **Classification**
  - Type of protection: Class I (3-pin power cord)
  - Degree of protection: Type CF
    - Insufflation tube (MAJ-590, MH-397)
    - Suction tube (MAJ-591)
- **Dimensions**
  - 295 (W) x 340 (D) x 150 (H) mm (housing dimensions)
  - Weight: 10 kg
- **Smoke evacuation function**
  - When the foot switch (optional) is depressed, insufflation and suction are interlocked to maintain a set abdominal pressure while smoke evacuation is performed. However, "OFF" is selected when the insufflation mode is selected, the function is inoperable. When abdominal pressure is below 3 mmHg, the function is inoperable.

**Options**

- **MH-317 Foot Switch**

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.
Clear Interior Spaces
For Clear-Thinking Procedures

The UHI-3 lets you keep your full concentration where it belongs. Its smoke evacuation maintains clear operative views, while the 35 L/min. insufflation quickly responds to gas leaks. In addition, the large front panel display allows you to check critical data at a glance.

Smoke Evacuation
Smoothly Removes Smoke & Mist

- Just press the foot switch (optional) to evacuate smoke and mist generated during electrosurgery and ultrasonic procedures, so you can keep your eyes on your surgery.

- Automatic Mist Evacuation Upon Ultrasonic Output
  When the UHI-3 is connected to the SonoSurg Ultrasonic Surgical System, mist evacuation begins simultaneously with ultrasonic output. (Ultrasonic output is controlled by the MAJ-51 SonoSurg G Foot Switch for the SonoSurg Ultrasonic Surgical System.)

Warnings & Automatic Pressure Relief
Light And Sound Alarms Alert You To Problems. Excess Gas Is Automatically Released When Abdominal Pressure Becomes Too High.

- Automatic Relief
  When abdominal pressure becomes too high, a warning lamp and alarm are activated, and a pinch valve on the suction tube opens automatically to release excess gas.

- Warning Alarms
  Upon detecting a tube obstruction or closed stopcock, a warning lamp and sound alarm are activated. When the CO2 gas cylinder is empty or the high pressure hose is improperly connected, the bar graph display for the gas supply shows a red light and an alarm sounds.

Powerful 35 L/min. Insufflation
Responds To Abdominal Gas Leaks By Quickly Returning To The Preset Level.

- 3 Main Flow Rate Settings
  You can quickly set flow rate to LOW 0.1-1.0, MED 1.1-19, or HIGH 20-35 L/min. 0.1-step settings between 0.1 and 2.0 L/min. allow delicate control of gas supply.

- Connectable To Medical Gas Pipeline
  The UHI-3's unique pressure control mechanism lets you connect it to your hospital's medical gas pipeline, eliminating the need for gas cylinders.

- Low-Noise Design
  Noise is kept especially low through an innovative opening and closing mechanism in the electromagnetic valve.

Large Front Panel Display
Check Critical Data At A Glance

Actual and preset pressures are displayed simultaneously. You can easily monitor variations in abdominal pressure and other necessary information, while staying focused on what you’re doing.
### System Chart

![Diagram showing the system chart for the UHI-3 High Flow Insufflation Unit.](attachment:diagram.png)

### Standard Set
- **UHI-3 High Flow Insufflation Unit**
- **MAJ-591 Suction Tube**
  - Includes Tube with Green Line, Small Diameter Tube (transparent), Differential Diameter Connector, Y-Shaped Connector, Extension Tube, and Small Luer-Lock Connector
- **MAJ-590 Insufflation Tube**
  - Includes Tube (transparent) and Filter Connecting Tube
- **Power Cord**

### Options
- **MH-317 Foot Switch**
- **MAJ-1080 Cylinder Hose (PIN) for UHI-3**
  - Includes Hose for Cylinder, Cap, and Wrench
- **MAJ-1081 Cylinder Hose (DIN) for UHI-3**
  - Includes Hose for Cylinder, Cap 1, Cap 2, Wrench (large), and Wrench (small)
- **MAJ-1082 Cylinder Hose (ISO) for UHI-3**
  - Includes Hose for Cylinder, Cap 1, Cap 2, Wrench (large), and Wrench (small)
- **MAJ-1084 Medical Gas Pipeline Adaptor (NIST) for UHI-3**
- **MAJ-1085 Medical Gas Pipeline Adaptor (DISS) for UHI-3**

### Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicable gas</td>
<td>CO₂ gas for medical use (Connectable to CO₂ cylinder or medical gas pipeline)</td>
</tr>
<tr>
<td>Abdominal pressure control</td>
<td>Indicators: Digital displays; Bar graph</td>
</tr>
</tbody>
</table>
| Abdominal pressure control: Settings | • Abdominal pressure can be adjusted in 1 mmHg increments between 3 and 25 mmHg.  
• To set pressure for 21 mmHg at 20 mmHg, press abdominal pressure control switch continuously for 3 seconds.  
• Previous pressure setting is retained. Selected pressure setting is placed into memory. For safety reasons, settings at 21 mmHg or higher are memorized as 20 mmHg.  
• “HIGH” mode: 20 to 35 L/min.  
• “MED” mode: 1.1 to 19 L/min.  
• “LOW” mode: 0.1 to 1.0 L/min.  
When power is turned ON, “LOW” mode is selected. |
| Flow rate settings | 3 flow setting modes: “HIGH” mode: 20 to 35 L/min.  
“MED” mode: 1.1 to 19 L/min.  
“LOW” mode: 0.1 to 1.0 L/min.  
Pressing the reset button will return the display to 0.0 L. |
| VOLUME indicator | Digital displays (0.0 to 19.9 L: 0.1 L steps / 20 to 999 L: 1 L steps) |
| Power requirements | Voltage (AC): 100 - 240 V  
Frequency: 50/60 Hz  
Input: 150 VA  
Voltage fluctuation: Within ±10% |
| Classification (Electro-Medical Equipment) | Type of protection: Class I (3-pin power cord)  
Degree of protection against electrical shock: Type CF Applied Part  
Insufflation tube (MAJ-590, MH-397): Suction tube (MAJ-591) |
| Size | Dimensions: 295 (W) x 340 (D) x 150 (H) mm (housing dimensions)  
Weight: 10 kg |
| Smoke evacuation function (optional) | When the foot switch (optional) is depressed, insufflation and suction are interlocked to maintain abdominal pressure at the set pressure while smoke evacuation is performed.  
Inoperative when “LOW” is selected as insufflation mode.  
Inoperative when the abdominal pressure is below 3 mmHg. |

Specifications, design and accessories are subject to change without any notice or obligation on the part of the manufacturer.