# MicroClave® and Kendall™ Comparative Matrix

**MicroClave** by ICU Medical Inc.

- **Split-septum**
- **Minimal residual volume**
- **Straight fluid path**
- **Clear housing**

- **Base Technology**: Internal cannula and silicone compression seal split-septum. Internal cannula windows are exposed by the insertion of a male luer and cannula enters the male luer's internal space to achieve flow.

- **Displacement**: Neutral: 0 to – 0.01 mL
- **Residual Volume**: 0.04 mL
- **Fluid Path**: Straight through polycarbonate cannula. Enhances flushing efficiency.
- **Moving Parts in Fluid Path**: No
- **Fluid Residual External on Disconnect**: Minimal
- **Clamping Sequence**: None required
- **Flow Rate**: 165 mL/min
- **Clear Available**: Yes
- **Antimicrobial Available**: Yes
- **# of Assembly Parts**: 3 of which 1 moves
- **Bacterial Transfer Performance**: The least amount of bacterial transfer of any connector tested.
- **Disinfection Directions**: Swab using aggressive circular motion for 3 seconds or per facility protocol.

**Kendall** by Covidien™

- **Mechanically activated silicone septum**. Insertion of a male luer pushes a silicone membrane apart and actuates a floating poppet inside of a 2-piece silicone fluid path assembly. Fluid flows through the top of the poppet, out the poppet windows, and around a multi-conduit fluid director formed by the poppet bottom and a second silicone component before leaving the valve through the lower connector housing before entering the catheter hub.

- **Displacement**: Neutral: 0 to – 0.01 mL
- **Residual Volume**: 0.12 mL (0.08 mL²)
- **Fluid Path**: Fluid exits male luer into a silicone chamber, then into polycarbonate column.
- **Moving Parts in Fluid Path**: Yes
- **Fluid Residual External on Disconnect**: Minimal
- **Clamping Sequence**: None required
- **Flow Rate**: 161 mL/min (120 mL/min²)
- **Clear Available**: Yes
- **Antimicrobial Available**: No
- **# of Assembly Parts**: 5 components, 3 move on luer access
- **Bacterial Transfer Performance**: Exhibits a higher bacterial transfer rate than MicroClave.
- **Disinfection Directions**: Always swab the top of the valve in a circular motion using an alcohol prep pad for 5 seconds, flip the pad over and wipe for another 10 seconds, and allow to dry.

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**PRODUCT PERFORMANCE**

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<thead>
<tr>
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<th>Kendall Technology</th>
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*Also marketed by Nexus® Medical as Nexus NIS®-6P*

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2. Nexus NIS®-6P Brochure

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