MicroClave[®] and One•Link[®] Comparative Matrix

MicroClave by ICU Medical Inc. One•Link by Baxter Healthcare Corp. Split-septum with Mechanically internal blunt cannula actuated septum 0.43" 0.54 • Minimal • Larger residual volume residual volume • Straight fluid path ⊸ Multi-conduit 1.27 fluid path Clear housing 1.807 g (MicroClave Clear) g 1.874 g (MicroClave) (One•Link)

PRODUCT PERFORMANCE	MICROCLAVE TECHNOLOGY	ONE•LINK TECHNOLOGY
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.	Mechanically actuated silicone septum. Insertion of a male luer compresses the silicone seal, forcing it against a rigid column, spreading open the top of the seal. Fluid enters the silicone seal chamber, then enters the column through two windows, achieving flow.
Displacement	Neutral: o to -0.01 mL	Neutral: o to -0.01 mL
Residual Volume	0.04 mL	o.o8 mL (2 times larger)
Fluid Path	Straight through polycarbonate cannula. Enhances flushing efficiency.	Fluid exits male luer into a silicone chamber, then into polycarbonate column.
Moving Parts in Fluid Path	No	Yes
Number of Assembly Parts	3, of which 1 moves on luer access.	4, of which 2 move on luer access.
Fluid Residual External on Disconnect	Minimal	Minimal
Clamping Sequence	None required	None required
Flow Rate	165 mL/min	109 mL/min ¹
Clear Available	Yes	Yes
Antimicrobial Available	Yes	No
Patient Comfort	20% smaller profile, 20-23% less weight. Smooth profile.	Larger and heavier than MicroClave. Irregular profile.
Bacterial Transfer Performance	The least amount of bacterial transfer of any connector tested. ²	Exhibits a higher bacterial transfer rate than MicroClave. ³
Flushing Performance	Highly efficient. Connector clear of blood elements with minimal flush volumes from 2 to 7.5 mL ⁴ Not recommended to change connector after blood draw.	Baxter recommends flushing One•Link connector with 10 mL or more after blood infusion/sampling. If One•Link connector cannot be cleared of blood after blood infusion/sampling, replace immediately. ⁵

Performance data on file at ICU Medical Inc. San Clemente, CA 92673. Reference ENG-433

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How does MicroClave fluid path technology differ from One•Link?

MicroClave

The MicroClave incorporates an internal cannula and split-septum silicone compression seal. Upon insertion of a male luer, the silicone seal is depressed and the fluid path windows are exposed through the device's split-septum. MicroClave's patented split-septum/blunt cannula design allows for a straight-through fluid path with minimal residual volume.



One•Link

Insertion of a male luer compresses the silicone seal, forcing it against a rigid column, and spreading open the top of the seal. Fluid enters the silicone seal chamber and then enters the column through two windows, achieving flow.



The male luer depresses the silicone, forcing it against a rigid internal column which spreads the pre-split septum. The rigid column incorporates four channels to allow fluid flow around the spike, into the silicone, then into the windows of the spike.



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- Ryder M, James G, Pulchini E, Bickle L, Parker A. Presented at the Infusion Nursing Society Meeting, May 2011.
 Differences in bacterial transfer and fluid path colonization through needlefree connector-catheter systems in vitro.
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- 4. Breznock E, Sylvia C. BioSurg, Inc., March 2011. The in vivo evaluation of the flushing efficiency of different designs of clear needlefree connectors.
- 5. Baxter One•Link 7N8399 Directions For Use. Reference 07-19-65-473 12/2010.



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