



NanoClave™

Manifolds and Stopcocks

Needlefree manifolds and stopcocks featuring clinically differentiated Clave™ infection control technology.

icumedical
human connections

Help Minimize the Risk of Infection

While Efficiently Delivering IV Medications

Accessing your patient's IV line through the hub of an open stopcock or manifold may increase the risk of bacterial contamination.¹

While intravenous (IV) therapy is essential to patient care, accessing your patient's bloodstream may increase the risk of infection. As a result, the design of needlefree stopcocks and manifolds can be an important part of your efforts to minimize contamination and risk of bloodstream infection.



Using manifolds and stopcocks with Clave needlefree IV connector technology can help your efforts to minimize infection risks.²

ICU Medical's full line of needlefree stopcocks and manifolds feature clinically differentiated Clave infection control technology designed to minimize the risk of contamination by maintaining a closed system. These access ports are ideal for anesthesiology, oncology, and critical care, where simultaneous fluid delivery is critical.



NanoClave Stopcocks

Maintain a needlefree, closed system with automatic self-sealing connector technology.

Warning: Clave connectors may be incompatible with some male-luer connectors including prefilled glass syringes. To avoid damage to the Clave or syringes or male luers which may result in delays of medication administration and possible serious adverse events, users should confirm mating luers or syringes have an internal diameter range of 0.062" to 0.110". Check the internal diameter of the male-luer connector of the mating syringe prior to using it to access the Clave. Products outside of these dimensional tolerances should not be used.

"Closed catheter access systems are associated with fewer CRBSIs than open systems and should be used preferentially."

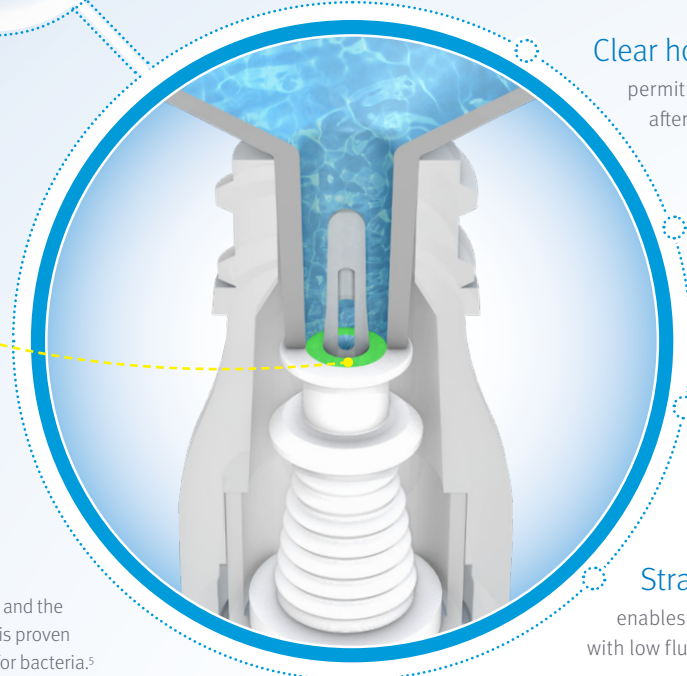
– The Centers for Disease Control and Prevention (CDC), Guidelines for the Prevention of Intravascular Catheter-Related Infections³

NanoClave Manifolds

Optimize fluid delivery and eliminate retrograde fluid flow with gravity-activated back check valve security.

Industry-Leading Infection Control Technology³

Clave needlefree IV connector technology can help your efforts to reduce infection risks by minimizing entry points for bacteria and maximizing the effectiveness of every flush, helping you comply with CDC and Infusion Nurses Society (INS) guidelines.⁴



Clear housing

permits visual confirmation of flush after use with medications or blood.

Minimal residual volume

(also referred to as priming volume) allows for lower flush volumes.

Split-septum

is a preferred design feature for needlefree connectors.¹

Straight fluid path

enables the clearing of drug residual with low flush volumes.⁶

Silicone Seal and Internal Cannula

Specifically designed to minimize contact between the connector's external surface and the internal fluid path upon luer activation, this proven Clave technology minimizes entry points for bacteria.⁵



Procedure-ready IV sets available with a range of manifold and stopcock configurations

Complement your workflow with multiple stopcock configurations in both three- and six-port manifold designs.

NanoClave Manifolds

	3-Port	6-Port
Flow Rate at Gravity through Mainline	315 mL/minute	495 mL/minute
Flow Rate at Gravity through NanoClave	110 mL/minute	110 mL/minute

Manifold Drug Compatibility

Alcohol	Yes
Lipids	Yes
Chemotherapy	Yes

NanoClave Stopcocks

Flow Rate through NanoClave Side Port	125 mL/minute
Flow Rate through Stopcock Fluid Channel	470 mL/minute

Stopcock Drug Compatibility

Alcohol	Yes
Lipids	Yes
Chemotherapy	Yes

To learn more about NanoClave manifolds and stopcocks, please call 877-946-7747 or visit www.icumed.com

- Guidelines for the Prevention of Intravascular Catheter-Related Bloodstream Infections, 2011 (Updated Recommendations July 2017)
- Bouza E, Munoz P, Lopez-Rodriguez J, et al. A needleless closed system device (Clave™) protects from intravascular catheter tip and hub colonization: a prospective randomized study. *J Hosp Infect.* 2003; 54:279-287.
- Global Healthcare Exchange (GHX) Market Intelligence data. Connectors, Needleless, Parenterals, [92-100]. 2017-2019. Includes stand-alone needlefree connectors and ancillary direct access devices (two-piece, hemodialysis, non-swabable, and non-patient contact connectors excluded)
- Infusion Therapy Standards of Practice, 2021
- Ryder M, RN, PhD. Comparison of Bacterial Transfer and Biofilm Formation on Intraluminal Catheter Surfaces Among Twenty Connectors in a Clinically Simulated In Vitro Model. Presented at World Congress Vascular Access (WaCoVA) 2018.
- Data on file at ICU Medical, Low Volume Flush Characteristics of Unique Needlefree Connectors M1-1223, Rev. 1.

icumedical
human connections