

The background of the slide features a close-up, shallow depth-of-field photograph of various medical tubing and connectors. The components are made of clear, translucent plastic and are arranged on a solid blue surface. Some connectors have multiple ports and ridges, while others are simpler. The lighting is soft, highlighting the textures and shapes of the plastic parts.

# nPulse™ Valve Platform



We Make Quality Patient Care Possible™

The nPulse Valve Platform of needle-free connectors for infusion therapy is designed to complement best clinical practices to reduce the risk of catheter-related bloodstream infections (CRBSI), and reflux-induced catheter occlusions.<sup>1-5</sup>

The nPulse platform has the lowest measured displacement and blood reflux of market leading valves.<sup>3</sup> It features neutral fluid displacement at both Luer connection or disconnection to help reduce reflux-related occlusions.<sup>5</sup> Equally important is maintaining the integrity of the septum using the self-opening split septum (SOSS) design, which helps protect the septum plane from abrasion unlike spike platforms.



Self-opening split septum (SOSS) results in no abrasion to sealed septum plane<sup>3,4</sup>



Flat, smooth, swabable surface promotes easy and complete cleaning<sup>3,4</sup>



Linear fluid path allows for easy blood clearing<sup>5</sup>



Lowest measured displacement and blood reflux of market leading valves<sup>5</sup>



Defends against microbial ingress<sup>2</sup> with dual-seal design



Low priming volume allows for lower flush volumes



Eliminates clinician clamping to control valve-induced reflux<sup>4</sup>

## TECHNICAL SPECIFICATIONS

- Priming Volume: <0.1 ml
  - Functional Actuations: 200
  - High-Pressure Rated: 325 psi
  - Flow Rate at Gravity: 5 l/hr
- With the same test method, the flow rate through the ICU Medical MicroClave® was 5 l/hr.

## MATERIAL COMPATIBILITY

- Blood
- Alcohol
- Lipids
- Chlorhexidine Gluconate
- Sterilization: EtO, Gamma

## MANUFACTURING

- ISO 13485 Certified
- FDA Registered
- ISO Class 8 Cleanroom Manufacturing

## COMMERCIAL AVAILABILITY

- Bulk, non-sterile
- Packaged, Sterile (EtO)<sup>6</sup>



1. Jarvis W., MD. Choosing the Best Design for Intravenous Needleless Connectors to Prevent Bloodstream Infections. Infection Control Today, August 2010 ([www.infectioncontroltoday.com/infusion-vascular-access/choosing-best-design-intravenous-needleless-connectors-prevent-bloodstream](http://www.infectioncontroltoday.com/infusion-vascular-access/choosing-best-design-intravenous-needleless-connectors-prevent-bloodstream))

2. Ryder M, RN, PhD. Bacterial transfer through needle-free connectors. Comparison of nine different devices. Poster presented at the Annual Society for Healthcare Epidemiology of America (SHEA) conference 2007, Abstract 412.

3. Guideline for the Prevention of Intravascular Catheter-Related Bloodstream Infections, 2011 ([www.cdc.gov/hicpac/pdf/guidelines/bsi-guidelines-2011.pdf](http://www.cdc.gov/hicpac/pdf/guidelines/bsi-guidelines-2011.pdf))

4. FDA Medical Device Safety Alert, July 28, 2010: Letter to Infection Control Practitioners Regarding Positive Displacement Needleless Connectors

5. Data on file at NP Medical. Competitive Product Assessment, January 2012

6. Packaged Sterile - Rx Only. For safe and proper use of this device, refer to the directions for use.