MaxPlus® clear needleless connector
Quick reference guide

Step 1: Prime and attach
Invert to prime. Attach fully primed syringe or IV line to MaxPlus® clear connector. Tap while priming to purge all air. Remove protective cover and attach MaxPlus clear connector to hub of vascular access device, inserting luer into hub and rotating it until it stops. Do not overtighten.

Helpful hints:
• Prime and remove all air. Assures system is free of air, lubricates internal surface and helps reduce reflux.
• After priming, quickly attach MaxPlus clear connector or MaxPlus clear connector extension set to catheter hub. Prevents air from returning to primed device.
• Always grasp MaxPlus clear connector body during access, placement and removal. Prevents inadvertent tightening or loosening.

Step 2: Disinfect
Before and after every access, always swab top of MaxPlus clear connector with appropriate disinfectant and allow to dry. Friction and time enhance disinfection.

Helpful hints:
• Swab with alcohol, Chlorhexidine or approved disinfectant for 10-15 seconds, or according to your hospital protocol. Disinfects access port to assist infection protection as recommended by INS and CDC. Studies demonstrate increased friction and time enhance disinfection.
• Allow disinfectant to completely dry prior to connecting. Completes disinfection. Disinfectant must evaporate before disinfection is complete and dry to enable disconnection.

Step 3: Administer
Trace lines before connection. Attach luer from primed IV set or syringe to MaxPlus clear connector. If mating luer is two-piece spin collar, pull back collar, insert luer with straight in motion and rotate one-quarter turn clockwise, then push down and tighten spin collar. Anytime immediate flow is not achieved, detach and reattach.

Helpful hints:
• Confirm catheter patency prior to administration according to INS Standards (SAS Method). Enforces proper nursing practice.
• Always firmly grasp connector, NOT catheter line. Reduces inadvertent tightening or loosening.
• Insert luer slips with a straight-in motion and rotate them one-quarter turn clockwise. Never leave luer slips unattended. Ensures secure connection.

Step 4: Detach
DO NOT CLAMP before detaching syringe or IV set. To detach, grasp MaxPlus clear connector and carefully disconnect syringe or tubing.

Helpful hints:
• Disconnect prior to clamping. Ensures positive displacement performance.
• To disconnect, grasp body of MaxPlus clear connector and carefully rotate luer of fluid source counter-clockwise. Reduces catheter movement during disconnect.
• Upon disconnecting, the fluid residual may remain. Swab off with the preferred disinfectant. Maintains an aseptic surface.

Step 5: Flush
Flush MaxPlus clear connector after each use according to facility protocol; make sure device is visually clear. Lock with normal saline or heparinized saline.

Helpful hints:
• Clear MaxPlus clear connector for saline flush. Reduces need for heparin.
• Always flush catheter immediately after infusion or aspiration using a push-pause technique until it is clear. Lower flush volumes can be used for fluid-restricted or pediatric patients. Flush using push-pause helps maintain patency.
• Do not bottom out syringe plunger. Prevents suction during "bottoming out," which may cause reflux.
• If catheter is multi-lumen, flush all lumens. Helps reduce occlusions.

1. Lange, V. "New interventions in addition to the central line bundle which are associated with a sustained reduction of central line-associated bloodstream infections." In program for Association for Professionals in Infection Control Control annual meeting, New Orleans, LA, July 10-12, 2010.