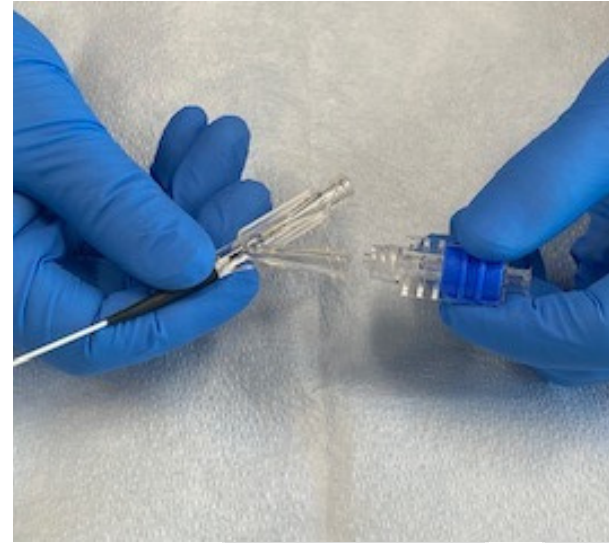


Sniper[®] Quick Guide

Balloon Occlusion Microcatheter

Balloon Prime

1. Attach the flow switch to the hub. Fill the large syringe with 3 ml of 50% contrast and attach to the flow switch



2. Pull the plunger to the top and turn clockwise to lock (wait 5 seconds). **Close** flow switch



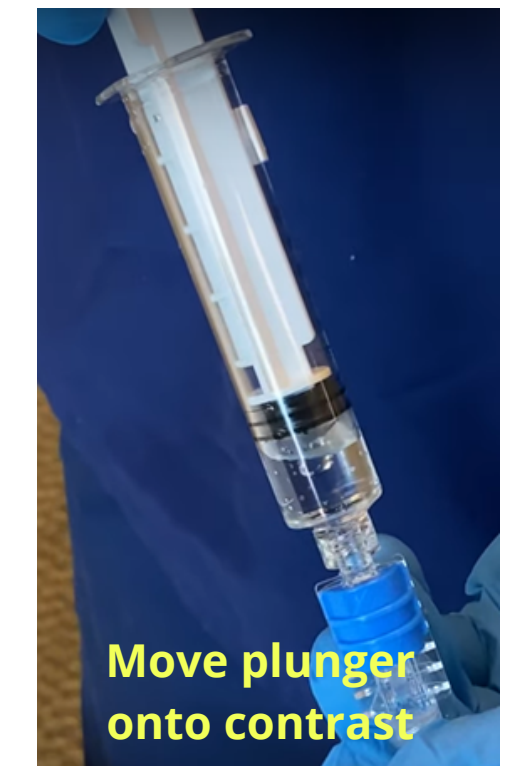
3. Drop the plunger down onto contrast, **then** remove the syringe, expel air and re-attach to the flow switch



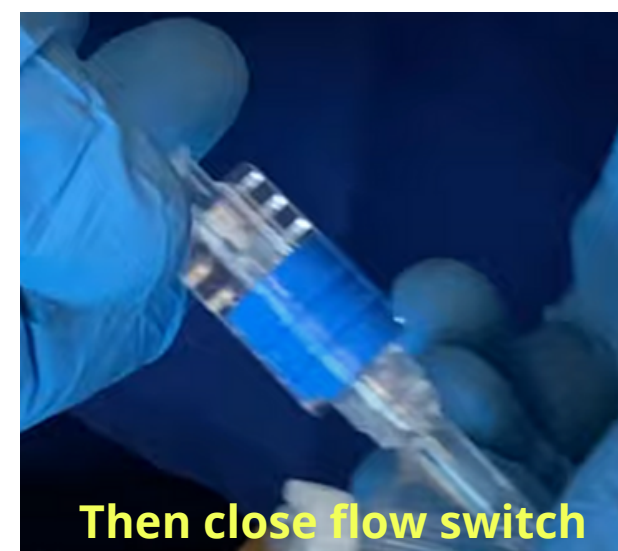
4. Pull the plunger to the top & lock it. **Open** flow switch



5. Bubbles will be seen. After the bubbles stop or significantly slow, move the plunger down and place the syringe on the table for at least 30 seconds



6. Before use, remove the syringe, *then* **close** the flow switch



7. Flush the hoop with saline *then* flush the guidewire lumen and insert guidewire

Sniper is ready for use

Balloon Inflation

- 1.Fill a 1ml syringe with 0.3 ml of 50% contrast
- 2.Connect syringe to flow switch on balloon port, open flow switch
- 3.Slowly add contrast until the balloon is visualized contouring the vessel wall
- 4.Close flow switch. Remove 1ml syringe

Balloon Deflation

- 1.Confirm large syringe contains 3 ml of 50% contrast
- 2.Connect syringe to flow switch, then open the switch
- 3.Pull plunger to top and lock until the balloon is completely deflated
- 4.Hold the syringe vertical, then move the plunger down onto contrast and wait a minimum of 30 seconds, then remove the large syringe from flow switch
- 5.Close flow switch

Troubleshooting

Unable to Visualize Inflated Balloon:

- Re-prime
 - Hold syringe vertical then pull plunger to top and lock it
 - After bubbles stop or significantly slow move plunger down and wait a minimum of 30 seconds
- Ensure the flow switch is closed
- A high-res spot image can be used to detect inflation with air

Balloon Migration:

- Deflate balloon
- Retract Sniper catheter until the balloon is in desired position
- Hold Sniper and diagnostic catheter in place, re-inflate balloon. This may require adjustment of balloon position during inflation

Resistance in Diagnostic Catheter:

- Ensure Touhy is completely **open** during any movement of Sniper
- Rehydrate Sniper and flush the diagnostic catheter
- Ensure the balloon is completely deflated

Balloon Will Not Deflate:

- Ensure the flow switch is **open** and large syringe plunger is locked at the top
- Remove flow switch and syringe and allow balloon to deflate on its own
- Slightly inflate then deflate balloon
- As a last resort, slowly inflate until balloon ruptures

Compatibilities	
Diagnostic Catheter	0.038" compatible or larger
Guidewire	0.014" or 0.016"
Embolic Beads‡	Up to 900 Um
Coils*	Up to 0.018"
Embolic Agents*	Lipiodol®, EtOH, DMSO, Y-90, Gelfoam, Glue (n-bCA)
Diagnostic Catheters with Limited Compatibility	
Cordis	Vertebral & Bernstein tip, 4 Fr
Penumbra	Select
Merit	Impress, 5 Fr
Specifications	
Balloon Diameter	6 mm maximum (occludes up to 4.5 mm vessels)
Catheter Functional Length	110 cm 130 cm 150 cm 165 cm
Tip Shape **	Straight Tip, K™-Tip
Catheter Outer Diameter (Proximal)	2.9F (0.038")
Catheter Inner Diameter (Distal)	2.2F (0.029")
Catheter Inner Diameter (Infusion Lumen)	0.020" (0.51 mm)
Dead Space Volume (hub + catheter)	0.32 ml (110 cm) 0.36 ml (130 cm) 0.41 ml (150 cm) 0.45 ml (165 cm)
Injection Pressure	Up to 900 psi

*See Sniper Chemical Compatibility Statement Letter MK-0351 at <http://embolx.com/products/>. Embolx does not make any claims, for informational purposes only.

**Consult your sales representative for local market clearance and availability.

‡Boston Scientific Embozene™ 900 µm, 19020-S1. Merit Medical® Emboshere® 700-900 µm, S810GH. Data on file.

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