THE ORIGINAL SOFT-FLOW®* LOW-VELOCITY ARTERIAL CANNULA

The easy-to-insert, gentle-on-aorta cannulae
WE HEAR YOU. THAT'S WHY WE BROUGHT SOFT-FLOW® CANNULAE BACK.

Your feedback ensures we continue to offer solutions that have made our cannula portfolio the largest worldwide.

In fact, your feedback is why we collaborated with MC3 to bring back the arterial cannulae cardiac surgeons have used for more than 20 years: the Original Soft-Flow Cannulae. Medtronic obtained the exclusive global distribution rights to Soft-Flow from MC3, so you could again use these favored† cannulae in your practice.

Our collaboration with MC3 continues today. We're working together to bring you even more enabling technology options, along with a vision for what's next. We are committed to listening to you and putting your patients first.

A commitment to exploring better outcomes.
A commitment to hearing you.

**Medtronic**  
**MC3**

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**AS GENTLE AS ALWAYS**
**THE ORIGINAL LOW VELOCITY AORTIC CANNULA**

We understand your patients need a gentle, low-velocity cannulation solution for the ascending aorta. The Soft-Flow® closed tip has an inner cone that purposefully directs flow through side ports. This results in a diffuse, lower velocity flow.

"Lower exit force and flow velocity may decrease the incidence of atheroemboli and stroke."¹

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**Important Safety Information**
Care and caution should be taken to avoid damage to vessels and cardiac tissue during cannulation or other cardiac surgery procedures. For a listing of indications, contraindications, precautions, warnings, and potential adverse events, please refer to the Instructions for Use. Caution: Federal law (USA) restricts this device to sale by or on the order of a physician.

**REDUCE JETTING EFFECT**

Advanced flow visualization analysis demonstrates Soft-Flow arterial cannula provides a divided blood flow pattern which lessens the jetting effect observed with open-tip aortic cannulae.**

The closed diffusion tip is designed to help reduce the risk of dislodging plaque from the aortic wall.²

**COMPARE VELOCITY PERFORMANCE**

Soft-Flow® arterial angled tip cannula showed a lower exit velocity than the Medtronic Select Series™ arterial angled open-tip cannula in an independent 3C-PIV bench test.**

**MC3, Inc. data on file. Testing was conducted in 3rd-party laboratory setting with aortic arch models and CPB circuit that utilized a Three-Component Particle Image Velocimetry (3C-PIV) technology to capture flow data. 3D velocity data is visualized in one 2D plane per image. The images capture the peak velocity for each cannula. Flow still occurs in unshaded vessel areas.**
RIGHT FLOW
WHEN YOU NEED IT

Soft-Flow® cannula flow charts are provided for your comparison. Each flow curve represents in vitro laboratory data obtained using water at room temperature. The actual pressure drops encountered in a clinical situation may vary from those shown, depending on the blood viscosity and temperature. All pressure drops are measured in mm Hg and flow rates in liters of water per minute.

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RIGHT TIP DESIGN MEANS AN EASIER INSERTION

You want an aortic cannula that is easy to insert and helps provide the ideal flow performance for each patient. That’s Soft-Flow®. See why it’s been a favorite† cannula among surgeons, perfusionists, and training institutions for more than 20 years.

- The tapered and reverse-angled tip¹ with smooth rimmed bevel enables an easy and gentle insertion
- Predictably maneuvers through small incisions and into aorta
- Patented inner cone design with internal flow deflection
- Soft dispersion pattern of blood through four side ports
- Convenient repositionable suture ring
- Avoids kinks with flexible wirewound cannula body
- Extended body model spans anatomical distances and offers flexibility

DESIGNED WITH YOUR EASE IN MIND

Soft-Flow® cannulae are designed with your ease of use in mind and engineered to treat your patients gently. Each wirewound cannula body is kink-resistant to make your procedures go easier. Explore the unique features of extended, straight, and angled diffuse-tip models to help find your ideal Soft-Flow arterial and deliver just the right flow.

EXTENDED BODY
The extended Soft-Flow® body length can be positioned across various patient anatomies to reach a little farther. Clearly visible depth markings and a repositionable suture ring further assist proper placement to meet your needs.

STRAIGHT TIP AND ANGLED TIP
A smooth, tapered, reverse-angled tip is designed to facilitate an easy insertion and a gentle flow. An orientation line is included to help you position the Soft-Flow® angled-tip cannulae. An integrated suture bulb or suture flange also support placement. Choose a 3/8 inch vented or non-vented connector depending on your preference.
ORDERING INFORMATION

Soft-Flow®* Extended
14.5 in (37 cm) overall length
with suture ring

- Vented 3/8 in (0.95 cm) connector
  - 4949 21 Fr (7.0 mm)
  - 4951 24 Fr (8.0 mm)
- Non-vented 3/8 in (0.95 cm) connector
  - 4948 21 Fr (7.0 mm)
  - 4950 24 Fr (8.0 mm)
  10 per carton

Soft-Flow®* Straight Tip
14 in (35 cm) overall length with
suture bulb

- Vented 3/8 in (0.95 cm) connector
  - 5798 21 Fr (7.0 mm)
  - 5841 24 Fr (8.0 mm)
- Non-vented 3/8 in (0.95 cm) connector
  - 5842 21 Fr (7.0 mm)
  - 5843 24 Fr (8.0 mm)
  10 per carton

Soft-Flow®* Angled Tip
14 in (35 cm) overall length with
suture bulb

- Vented 3/8 in (0.95 cm) connector
  - 7072 18 Fr (6.0 mm)
  - 5761 21 Fr (7.0 mm)
  - 5762 24 Fr (8.0 mm)
- Non-vented 3/8 in (0.95 cm) connector
  - 5768 24 Fr (8.0 mm)
  10 per carton

Soft-Flow®* Angled Tip
14 in (35 cm) overall length with
suture flange

- Vented 3/8 in (0.95 cm) connector
  - 7080 18 Fr (6.0 mm)
  - 6394 21 Fr (7.0 mm)
  - 6386 24 Fr (8.0 mm)
- Non-vented 3/8 in (0.95 cm) connector
  - 6392 21 Fr (7.0 mm)
  - 6384 24 Fr (8.0 mm)
  10 per carton

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For more information, contact your local Medtronic Cannula Products Representative. U.S. Customer Service: (800) 328-1357.

References

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Soft-Flow® arterial cannulae are manufactured by MC3, Inc. and exclusively distributed by Medtronic.

Not all products are approved in every geography. For distribution only in markets where Soft-Flow cannula has been approved or cleared.

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