

## **NEW**INTELLIGENT TOUCH



PTS

PERSONALIZED TOURNIQUET SYSTEMS

## **PTSii**

## Personalized Tourniquet System

Delfi's state-of-the-art portable electronic tourniquet systems have advanced personalization safety features and save valuable space in modern surgical settings.

Available in both single and twin system configurations, fully independent channels are color-coded for optimal safety during simultaneous bilateral limb surgeries and IVRA (Bier Block) procedures.

The PTSii Personalized Tourniquet System is used with Delfi's unique line of personalized tourniquet cuffs for pediatric to bariatric patients and is compatible with most standard single port tourniquet cuffs.

## INTRODUCING THE NEW GENERATION PTSii



## TWO-IN-ONE

Independent instruments provide flexibility and cost savings to facilities with multiple ORs, by allowing twin systems to be separated and used as two single units. For IVRA procedures, simply bring units back together

### INTELLIGENT TOUCH

NEW Intuitive user interface simplifies key tourniquet parameters and user training

### PERSONALIZED PRESSURE LIMITS

Limits normal maximum pressure to 475 mmHg, and allows selection of extended pressure up to 600 mmHg if required for individual patients

## ADVANCED LEAK DETECTION DURING SURGERY

Monitors the tourniquet cuff, tubing and connectors, and safely alerts staff to hazards

### **SPEED**

Reduces set-up and cuff inflation times

## INTEGRATED TOURNIQUET CUFF TESTING

Enables cuff testing before or after surgery as recommended in current AORN Standards and Recommended Practices

## **ADVANCED SAFETY FEATURES**

Intuitive time and pressure safety alarms; unique self-test and calibration tests; visible displays of pressure and time

## **GREATEST BATTERY LIFE**

Up to 10 hours of operation with tested cuffs

## CONNECTIVITY

Allows integration with OR information networks

### PTS PORTABLE KITS

NEW Featuring a single or twin PTSii Personalized Tourniquet System with Easi-Fit Cuffs and accessories

## SAFETY PERFORMANCE AND PERSONALIZATION IN A COMPACT SOLUTION



## EASI-FIT

## Variable Contour and Cylindrical Cuffs

Delfi's Easi-Fit Variable Contour and Cylindrical Cuffs are uniquely designed to make cuff application easy and consistent. The unique Application Handle and Stabilizing Strap make cuff removal faster, and help stabilize the cuff on the limb.

Easi-Fit cuff's contour shape in combination with a patented variable fastener allows a superior personalized fit along both proximal and distal edges of the cuff to help lower limb occlusion pressure (LOP). Matching Limb Protection Sleeves are recommended and available to help to protect the skin beneath the cuff while the cuff is pressurized.

Easi-Fit cuffs are reusable and available in both single and dual port configurations. For use with Delfi's PTSii Personalized Tourniquet System, and compatible with most automatic tourniquet instruments.





## OFFSET PORT DESIGN

Takes the guesswork out of port location, allows the ports to be positioned in the desired location prior to securing the cuff around the limb

## **CONTOUR CUFF SHAPE**

In combination with a unique variable fastener allows a superior fit along both proximal and distal edges of the cuff

### **VARIABLE FASTENER**

Allows the cuff to conform to a wide range of limb shapes for uniform transfer of cuff pressure across the entire cuff width to help lower limb occlusion pressure

## **APPLICATION HANDLE**

Makes cuff application more consistent, opens to make cuff removal faster and helps maintain the cuff in a stable position on the limb

## SECONDARY FASTENER

For enhanced stability and ease of application

## **CUFF APPLICATION** "EASI" AS 1,2,3



Grasp the application handle and position the ports on the limb at the desired location



Slide the securing strap under the handle





Tension the cuff for a snug application and secure the strap

## **EASI-FIT VARIABLE CONTOUR**

Available in 18", 24" and 34" x 4.5" W Limb Circumference Range 11" - 30"



## EASI-FIT CYLINDRICAL FOR BARIATRICS

Provide the best fit for bariatric limbs Available in 44" and 52" x 4" W Limb Circumference Range 29" - 47"



## MATCHING LIMB PROTECTION SLEEVES

Designed to help protect the patient's limb

- Proven performance
- Cuff matched
- Easy application
- Included with every cuff



For cuff selection refer to Limb Circumference Charts on page 17.

## **VARI-FIT**

## Variable Contour Cuffs

Delfi's Vari-Fit Variable Contour Tourniquet Cuffs provide a better personalized fit and occlude blood flow (LOP) at lower tourniquet pressures.

Vari-Fit cuffs are soft and flexible for easy cuff application. The unique contour shape allows for close conformance to a wide range of limbs and degree of taper, and combined with the use of Matching Limb Protection Sleeves eliminates gaps to provide a snug fit.

Available in three sizes optimized for the arm, thigh, and lower leg. Arm cuff also available in dual bladder (IVRA) configuration.

Both sterile single-use and reusable cuffs are available in single and dual port configurations.

For use with Delfi's PTSii Personalized Tourniquet System and compatible with most automatic tourniquet instruments.

## SUPERIOR PERSONALIZED FIT AND PERFORMANCE







## **CONTOUR CUFF SHAPE**

In combination with two unique pivoting fasteners allows a superior fit along both proximal and distal edges of the cuff

### **VARIABLE FASTENERS**

Allow the cuff to conform to a wide range of limb shapes for uniform transfer of cuff pressure across the entire cuff width to help lower limb occlusion pressure (LOP)

## SECONDARY FASTENER

For enhanced stability and ease of application

### BETTER INVENTORY MANAGEMENT

With a cost effective personalized solution requiring stock of only three cuffs sizes, compared to the four to seven cylindrical cuffs needed to cover a similar range of limb circumferences

## WHY VARIABLE CONTOUR?

The "Variable" contour in Delfi's Vari-Fit cuffs, comes from an innovative design which combines both a specific contour shape and pivoting fasteners, allowing the cuff to conform to the patient's unique limb shape, providing a personalized fit on a range of limbs with a high degree of taper to almost cylindrical.



## ALLOWS FOR STOCKING OF ONLY (3) SIZES

Vari-Fit's wide bladder design (5.75") allows for even pressure distribution helping lower Limb Occlusion Pressure (LOP).

Optimized for arm, thigh and lower leg. Arm cuff also available in IVRA configuration.

Limb Circumference Range 9" - 30"



## MATCHING LIMB PROTECTION SLEEVES

Designed to help protect the patient's limb

- Proven performance
- Cuff matched
- Easy application
- Included with every cuff



For cuff selection refer to Limb Circumference Charts on pages 17 & 18.

## PETITE-FIT

## Small Adult Cylindrical Cuffs

Delfi's Petite-Fit Small Adult Tourniquet Cuffs with Matching Limb Protection Sleeves were invented specifically for adults with small limbs to help lower limb occlusion pressure (LOP), and provide maximum surgical exposure.

Petite-Fit cuffs are reusable and available in two cuff sizes, in single and dual port configurations.

For use with Delfi's PTSii Personalized Tourniquet System, and compatible with most automatic tourniquet instruments.

## DESIGNED FOR ADULTS WITH SMALL LIMBS





## SOFT AND FLEXIBLE

Design of both cuffs and Matching Limb Protection Sleeves allow close conformance around small limbs for the application of tourniquet pressure

## P-SHAPED CUFF DESIGN

Allows each cuff to adapt to a wide range of limb circumferences and allows the cuff to conform to small circumference limbs. An offset port guides tubing away from the surgical site, reducing obstruction and making draping of the limb and cuff easier

### TWO INDEPENDENT CUFF FASTENERS

Help make proper cuff application easier, and provide a secondary means of securing the cuff around the limb

### **OPTIMIZED CUFF WIDTH**

The width of each cuff is designed to reduce the need for high tourniquet pressures while providing the maximum surgical exposure



## SMALL LIMBS NEED SMALL CUFFS

Available in two cuff widths 3" and 3.5" Limb Circumference Ranges 6.75" - 15.3"



## FOR USE WHEN STANDARD ADULT TOURNIQUET CUFFS ARE TOO WIDE FOR SURGERY

## MATCHING LIMB PROTECTION SLEEVES

Designed to help protect the patient's limb

- Proven performance
- Cuff matched
- Easy application
- Included with every cuff



For cuff selection refer to Limb Circumference Charts on page 17.

## PEDI-FIT

## Pediatric Cylindrical Cuffs

Children are special, and require special tourniquets for surgery.

Delfi's Pedi-Fit Pediatric Tourniquet Cuffs with Matching Limb Protection Sleeves were invented specifically for children to meet their unique requirements to help lower limb occlusion pressure (LOP), and provide maximum surgical exposure on small limbs.

Available in four cuff sizes to fit the limbs of neonates to adolescents. Both reusable and sterile single-use cuffs are available in single and dual port configurations.

For use with Delfi's PTSii Personalized Tourniquet System, and compatible with most automatic tourniquet instruments.

## PERSONALIZED FOR CHILDREN, FROM NEONATES TO ADOLESCENTS







### **SOFT AND FLEXIBLE**

Design of both cuffs and Matching Limb Protection Sleeves allow close conformance around pediatric limbs for the application of tourniquet pressure

## P-SHAPED CUFF DESIGN

Allows each cuff to adapt to a wide range of limb circumferences and allows the cuff to conform to small circumference limbs. An offset port guides tubing away from the surgical site, reducing obstruction and making draping of the limb and cuff easier

### TWO INDEPENDENT CUFF FASTENERS

Help make proper cuff application easier, and provide a secondary means of securing the cuff around the limb

### **OPTIMIZED CUFF WIDTH**

The width of each cuff is designed to reduce the need for high tourniquet pressures while providing the maximum surgical exposure



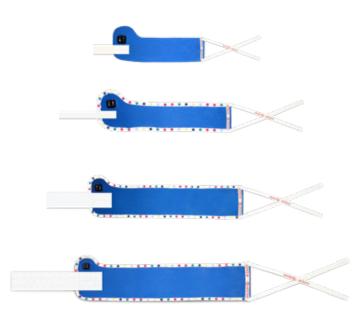
## PEDI-FIT GROWS ALONGSIDE WITH CHILDREN

Designed to conform to a wide range of limb shapes and sizes, from neonates to adolescents.

Our line of Pedi-Fit Sterile Single-Use cuffs features a lower profile for superior limbshape matching helping to lower limb occlusion pressure (LOP).

## FOR THE SMALLEST OF PATIENTS

Available in four cuff widths 1.5", 2.25", 3" and 3.5" Limb Circumference Range 3.5" - 15.3"



## MATCHING LIMB PROTECTION SLEEVES

Designed to help protect the patient's limb

- Proven performance
- Cuff matched
- Easy application
- Included with every cuff



For cuff selection refer to Limb Circumference Charts on pages 17 & 18.

## **EMT**

## **Emergency & Military Tourniquet**

Delfi's unrivalled Emergency & Military Tourniquet is designed to deliver the highest level of tourniquet safety with durable portability. In ground-based tactical situations and first response trauma incidents, the EMT is used as a life-saving haemorrhage control device.

Based on over 40 years of Delfi's world leading tourniquet technology, the EMT's wide bladder pneumatic design is proven to completely stop arterial blood-flow on both upper and lower limbs, unlike narrow tourniquets which are often ineffective no matter how tightly they are applied, potentially causing further injury to the limb.

An independent assessment completed by the United States Army Institute of Surgical Research (USAISR) found the EMT to be effective in 100% of all trials. In addition, the EMT was found to be "wider and thus significantly less painful than any device tested and is much less likely to induce nerve damage".

## HOSPITAL PERFORMANCE FOR MEDICS ON THE MOVE



## **FEATURES**

### INTUITIVE RELIABLE DESIGN

Durable aluminum clamp and superior materials designed to withstand the elements. No hook or loop is used which can become ineffective if contaminated with mud and dirt especially in field applications

### SAFE AND RAPID INFLATION

A pneumatic pump delivers fast and safe tourniquet pressure, inflating only the used length of the bladder until blood flow is stopped

### SPEED AND EASE

Fast and easy one hand application for self-aid situations and crucial time savings. Easy slip-on design can also be wrapped around if distal end of limb is inaccessible. Requires less than 30 seconds to apply and inflate!

## PERSONALIZED FIT

Provides close conformance to a wide range of upper and lower limb shapes and sizes, with a circumference range from 3 in. (8cm) to 34 in. (86cm)

### LIGHTWEIGHT AND COMPACT

Space-saving lightweight design ideal for any emergency kit and medical workers on the move. Weight 7.8 oz (220 grams), rolled up size 5 x 2.75 x 2.5 in. (13 x 7 x 6.4 cm)

### **OPTIMIZED WIDTH**

A wider 3.5 in. (8.9 cm) bladder width results in the need for lower pressure to fully occlude the limb, making it far less painful and less likely to cause nerve damage

## **MLPS**

## Matching Limb Protection Sleeves

Delfi's Matching Limb Protection Sleeves (MLPS) are uniquely matched to the size and shape of each specific Delfi cuff model, to provide optimal personalized limb protection.

Delfi's MLPS help protect underlying skin and soft tissues from injuries such as pinching wrinkling and shearing. The use of Delfi MLPS is supported by published surgical literature.

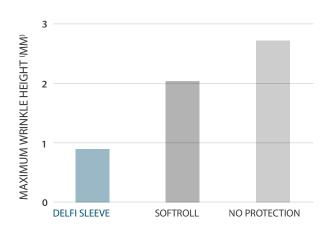
Every Delfi sterile single use and resuable cuff includes Matching Limb Protection Sleeve (MLPS). For MLPS selection refer to Purchasing Guide-



## **FEATURES**

- · Quick and easy application
- Soft and wrinkle-free
- Two layers of protection
- Prevents skin entrapment at cuff overlap
- Latex-free
- Save time with colour coding for easy selection
- Protects skin from pinching and shearing
- Does not clog hook fasteners
- Helps extend the life of reusable cuffs
- Non slippery material prevents cuff from sliding

## LIMB PROTECTION COMPARISON



As recommended in current AORN Standards, Recommended Practices and Guidelines, using appropriate limb protection under the cuff can significantly reduce soft tissue damage

In extensive testing using a molding and digitizing technique, results have shown that a fitted sleeve that is matched to a specific cuff and that applies a controlled amount of compression to the limb virtually eliminates pinching and wrinkling of the underlying skin reducing localized pressure gradients, which can result in soft tissue damage.

## ROLL STAND



## **PTS Roll Stand**

The PTS Roll Stand is a strong and sturdy mobile stand for use in a wide range of healthcare and clinical environments, including rehabilitation clinics and training rooms. Designed to securely hold up to two separate PTS for BFR instruments, plus accessories.

The combination of a low-profile base, all-locking castors, and a solid aluminum column improves stability, and increases maneuverability. The included PTS Roll Stand Basket stores the tourniquet cuffs, keeps hoses tidy and makes access easy.

## **FFATURES**

- Sturdy mobile roll stand
- Durable rubber castors
- Accessory wire basket included featuring dual hose management hooks
- Power Adapter Holder
- Small foot print
- Easy to clean design

## **DIMENSIONS**

- 50.25" x 22" (Assembled)
- Weight 14 Lbs

Additional PTS Roll Stand Basket with mounting clamp can be purchased seperately.



## CASES

## PTS Transport Bag & Case

Delfi's PTS Transport Bag and Transport Case are custom designed to hold a single or twin PTSii system including accessories and cuffs. The light and rugged cases are optimized for transport and storage of Delfi's PTS Personalized Tourniquet Systems, making it the ideal solution for medics on the move-

## TRANSPORT BAG FEATURES

- Rugged fabric construction
- Rubber feet
- Removable adjustable carrying strap
- Low profile handle
- Pass through luggage pocket
- Business card holder
- Separate padded PTS case and cuff pouch

## **DIMENSIONS**

- Exterior (L×W×D) 16" x 8.5" x 9.5" in
- Weight empty 3 Lbs

## TRANSPORT CASE FEATURES

- Automatic purge valve keeps water and dust out while balancing air pressure
- Watertight, crush-proof, and dust-proof
- Super-light polymer
- Custom fitted PTS foam insert
- Business card holder
- Temperature range 60° / 160° F (-51° / 71° C)
- Limited lifetime warranty

### **DIMENSIONS**

- Exterior (L×W×D) 19.18" x 15.79" x 10.50" in
- Weight empty 8.2 Lbs





## PTS

## Personalized Tourniquet Systems

## **Product List**

## **About Us**

Delfi Medical Innovations is a world leader in advancing tourniquet technology and safety Members of Delfi's team have been exclusively involved in tourniquet development and evaluation for more than 40 years

Delfi's patented tourniquet instruments and tourniquet cuffs have been designed to help surgeons and operating room nurses provide personalized safe and effective care for their patients

## **Contact Us**

For sales enquiries and ordering information contact Customer Service at:

1.800.933.3022 (US & Canada) + 604.742.0600 (Elsewhere) sales@delfimedical.com

## PTSii Personalized Tourniquet Systems

Single Channel · Single Port System	9-2200-001
Twin Channel · Single Port System	9-2200-500
Single Channel · Single Port System & Easi-Fit Cuffs Kit	9-2200-450
Twin Channel · Single Port System & Easi <sup>-</sup> Fit Cuffs Kit	9-2200-400

Delfi Tourniquet Cuffs are latex free, with positive locking connectors, and include Matching Limb Protection Sleeves (MLPS). Single-Use Cuffs include 30" tubing-

## Easi-Fit Variable Contour and Cylindrical, Reuseable

Size (Lx	W)	Single Port	<b>Dual Port</b>	MLPS (Replacements - 10 per box)
18" x 4.5"	Contour	9-7500-018	9-7600-018	9-7920-018
24" x 4.5"	Contour	9-7500-024	9-7600-024	9-7920-024
34" x 4.5"	Contour	9-7500-034	9-7600-034	9-7920-034
44" x 4.5"	Cylindrical	9-7500-044	9-7600-044	9-7920-044 (5 per box)
52" x 4.5"	Cylindrical	9-7500-052	9-7600-052	9-7920-052 (5 per box)

## Vari-Fit Variable Contour and IVRA (Bier Block), Sterile Single-Use (10 per box)

Size (Lx)	<b>V</b> )	Single Port	Dual Port
26" x 5.75"	Arm	9-9300-002	9-9400-002
37" x 5.75"	Thigh	9-9300-003	9-9400-003
23" x 5.75"	Lower Leg	9-9300-004	9-9400-004
26" x 5.75"	IVRA (arm)	9-9300-011	9-9400-011

## Vari-Fit Variable Contour and IVRA (Bier Block), Reuseable

Size (LxW)	Single Port	<b>Dual Port</b>	MLPS (Replacements - 10 per box)
26" x 5.75" Arm	9-7350-002	9-7450-002	9-7920-002
37" x 5.75" Thigh	9-7350-003	9-7450-003	9-7920-003
23" x 5.75" Lower Leg	9-7350-004	9-7450-004	9-7920-001
26" x 5.75" IVRA <sup>(</sup> arm)	9-7350-011	9-7450-011	9-7920-002
*Set of 4	9-7350-005	9-7450-005	

<sup>\*(</sup>Includes one of each; arm, thigh, lower leg, and IVRA arm cuff)

## Petite-Fit (Small Adult) Cylindrical, Reusable

Size Wx	L)	Single Port	Dual Port
3" x 15"	Cylindrical	9-8000-001	9-8100-001
3.5" x 17.5"	Cylindrical	9-8000-002	9-8100-002

## Pedi-Fit (Pediatric) Cylindrical, Sterile Single-Use (10 per box)

Size (WxL	_)	Single Port	<b>Dual Port</b>
1.5" x 7.25"	Cylindrical	9-9700-001	9-9800-001
2.25" x 10.5"	Cylindrical	9-9700-002	9-9800-002
3" x 15"	Cylindrical	9-9700-003	9-9800-003
3.5" x 17.5"	Cylindrical	9-9700-004	9-9800-004

### Pedi-Fit (Pediatric) Cylindrical, Reusable

Size (WxL)	Single Port	<b>Dual Port</b>	MLPS (Replacements - 10 per box)
1.5" x 7.25" Cylindrical	9-7700-001	9-7800-001	9-7900-001
2.25" x 10.5" Cylindrical	9-7700-002	9-7800-002	9-7900-002
3" x 15" Cylindrical	9-7700-003	9-7800-003	9-7900-003
3.5" x 17.5" Cylindrical	9-7700-004	9-7800-004	9-7900-004
*Set of 4	9-7700-005	9-7800-005	

<sup>\*(</sup>Includes one of each; 1.5", 2.25", 3" and 3.5" cuff)

### EMT Emergency & Military Tourniquet, Reusable

Size (HxWxD) 5" x 2.75" x 2.5" Cylindrical 9-1100-001

### Accessories

PTS Roll Stand with basket	9-2200-550
PTS Portable Basket w/ Pole Clamp	9-2200-501
PTS Transport Case	9-2200-410
PTS Transport Bag (with Padded	0 2200 210
Instrument Case & Cuff Pouch)	9-2200-310

## Delfi PTS Tourniquet Cuffs Selection & Application Guide

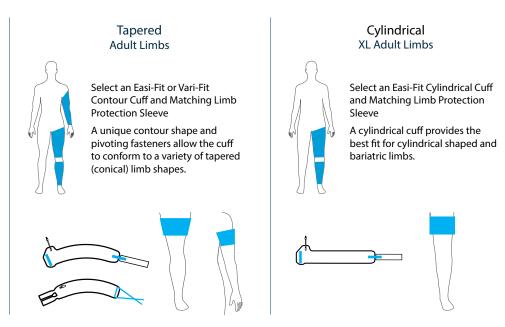




## **Recommended Tourniquet Cuff Selection**

- Determine the patient's limb shape using diagrams below, then measure the limb circumference. For cuff size selection, next refer to the Limb Circumference Charts on pages 17 and 18.
- To ensure the selected cuff is the correct size for the patient, verify there is sufficient overlap for the Secondary Fastener (located on underside) to fully engage with the loop material on surface of the cuff. Secondary Fasteners provide added stability to the cuff during use.

# Cylindrical & Tapered Neonate to Adolescent, and Small Adult Limbs Select a Pedi-Fit or Petite-Fit Cuff and Matching Limb Protection Sleeve For neonates, children, and adults with small limbs, select a cylindrical cuff having the most appropriate width for surgical exposure.



WARNING: For Delfi's PTS tourniquet instruments and cuffs, always follow manufacturer's detailed instructions.



## Recommended Tourniquet Cuff Application

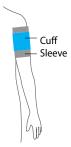
This Guide was prepared in consultation with James McEwen, PhD, the inventor of automatic tourniquets, to summarize relevant published guidelines and recommendations.\*

Select the most appropriate tourniquet cuff considering limb size and shape, and the specific procedure:

- Cuff shape should allow a snug fit along both proximal and distal edges.
- Cuff width should be the greatest width that still assures recommended distances from cuff edges to limb joints and surgical site.
- Cuff length should be the minimum that assures overlap around the limb sufficient to fully engage fasteners.

Use limb protection, ideally a sleeve specifically matched to the selected cuff.

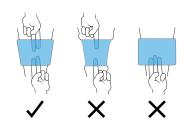
A limb protection sleeve matched to the size and shape of the selected cuff provides the best protection against skin wrinkling, bruising and other soft tissue injuries to the limb beneath the cuff.\*



Apply the selected tourniquet cuff snugly on the limb, over limb protection.

A snugly applied cuff allows two fingers easily under the cuff at both proximal and distal edges. If only one finger fits, the cuff is too tight; if three fingers fit, the cuff is too loose.

A loose cuff will require higher pressure to stop blood flow and may slide to an unsafe position on the limb during use. A tight cuff could impede venous return of blood from the limb even when deflated.



After cuff application, the limb distal to the cuff should be exsanguinated by elastic bandage or elevation, as determined by the surgeon.

An automatic tourniquet instrument with modern safety features and audio-visual alarms should be used with the cuff.

The optimum tourniquet pressure for each patient and cuff application can be set or checked by measuring Limb Occlusion Pressure (LOP).\*

Intraoperative monitoring of tourniquet safety parameters reduces the risk of complications. During the procedure, it is important to monitor tourniquet pressure and time, and to minimize both.

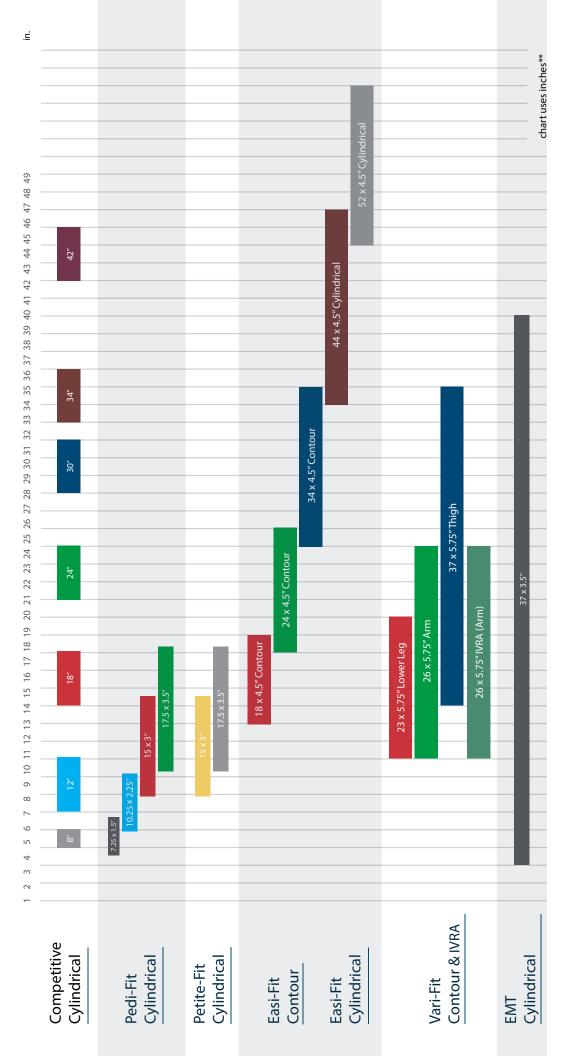
Upon final deflation of the tourniquet, the tourniquet cuff and underlying limb protection should be immediately removed from the limb.

## PTS Tourniquet Cuffs Delfi Reusable





Recommended Limb Circumference Range

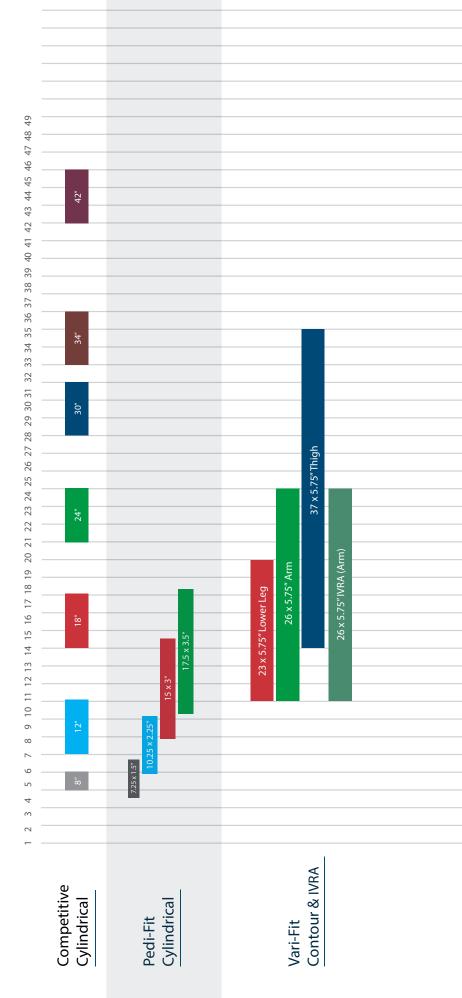


# Delfi Sterile Single-Use PTS Tourniquet Cuffs

Recommended Limb Circumference Range



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## INTRODUCING THE PTS PORTABLE KITS

Featuring the PTS Personalized Tourniquet Systems and Easi-Fit Cuffs in single and twin channel configurations



A COMPLETE SOLUTION FOR MEDICS ON THE GO!



To learn more on how our tourniquet systems help provide personalized safe and effective care for your patients visit:

www.delfimedical.com

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D-4900-012 Rev. 5