



# **Tourniquet** Systems

**A Personal Focus, A Personalized Fit** 



## No two patients are the same -

# that's why our market leading tourniquet system, the A.T.S.<sup>®</sup> 4000, treats every patient with Personalized Pressure<sup>®</sup> Technology.

The A.T.S. 4000 strives to personalize pressure for the patient by delivering the minimum tourniquet pressure at a specific time, with a specific cuff, for a specific patient limb.

Personalized Pressure Technology can help OR Staff choose a more individual, often lower, cuff pressure. Lower tourniquet cuff pressure reduces post-operative wound complications after Total Knee Arthroplasty (TKA).<sup>1</sup>

Applying lower tourniquet pressure has been found to result in less post-operative pain. One study demonstrated that an average thigh tourniquet pressure of 230 mmHg resulted in statistically significant lower pain over a multi-day recovery period versus a tourniquet pressure of 350 mmHg.<sup>2</sup>

Minimizing tourniquet pressure and pressure gradients by using Personalized Pressure Technology helps minimize the risk of nerve-related injuries.<sup>3</sup>







A.T.S. 2200 Tourniquet w/ Hoses 60220010100

#### A.T.S. 4000 Tourniquet w/ Hoses 60400010100

## System Features and Benefits

System reactives and Denents		
	Zimmer A.T.S. 4000	Zimmer A.T.S. 2200
Number of Ports	Dual Port	Single Port
Number of Potential Cuffs	Dual Cuff	Dual Cuff
Mounting Options	Table or Pole Mount	Table or Pole Mount
Battery Type and Life	Lithium lon 6 hrs	Lithium Ion 6 hrs
User Interface	Touchscreen	Touchscreen
International Alarm Standard 60601-1-8	Compliant	Compliant
Display	8.4" Color	7.0" Color
Minimum/Maximum Pressure	50/600 mmHg	50/600 mmHg
Pressure Accuracy	±3 mmHg (50-600 mmHg)	±4 mmHg (50-600 mmHg)
Limb Occlusion Pressure (LOP) 💙 Allows for patient specific pressure which ensures that the minimum pressure is used, reducing the potential for post-operative tourniquet pain or other complications, such as bruising, nerve damage and swelling.	Yes	No
Line Occlusion Detection (Acoustic Reflectometry) ♥ A kinked pneumatic tube can prevent an inflated cuff from deflating, resulting in unintentional tourniquet pressure. This alarm alerts OR staff that there is an occlusion in the line to the cuff and can prevent post-operative complications.	Yes	Yes
Cuff Alert <b>V</b> If OR staff tries to turn off the device and there is still pressure in the cuff, OR staff will be alerted. This ensures that an inflated cuff is not unintentionally left on a patient.	Yes	Yes
Automatic IVRA Cuff Lock Out ▼ If both cuffs are inflated, users are warned before deflating the second cuff. This takes the guess work out of IVRA procedures and potentially deflating both cuffs simultaneously. Additionally, the cuffs will stay inflated in the event of loss of both A/C and back-up battery power to the tourniquet machine.	Yes	Yes
Advanced Leak Detection Monitors the cuff and hoses for minor variations intraoperatively with the intention of reporting potential cuff/hose leaks. The machine will automatically maintain the pressure set point.	Yes	Yes
Pre-Op Cuff Test 💙 Checks for cuff leaks prior to use to avoid putting a new cuff on a patient in the middle of a procedure.	Yes	Yes

Proprietary Safety Feature

## Shaping the Future of Tourniquet Care

### Your patients come in all shapes and sizes, shouldn't your tourniquet cuff?

Disposable contour cuffs have been proven to provide a superior fit to tapered limbs over traditional cylindrical cuffs.<sup>4</sup>

Previous studies have shown that wide contoured tourniquet cuffs occlude flow at lower pressures than narrow cuffs.<sup>3,4</sup> For tapered limbs, contouring the cuff to match the conical shape of the limb has been shown to reduce limb occlusion pressure.<sup>4</sup> Contour cuffs, together with LOP, deliver a superior reduction of average pressure compared to traditional practice. Studies have also shown that wide cuffs reduce the risk of tourniquet-induced injury to underlying soft tissues.<sup>3,4</sup>

Variable Velcro Brand **Fastener Quick Release** Makes removing the cuff easy - no more picking at the corners

#### Variable Velcro Brand Fastener

Creates a pivot allowing the cuff to conform to a wide range of limb shapes, allowing a close fit at both the proximal and distal edges which has been shown to reduce LOP<sup>2,4</sup>

> **Cuff Color Coding** For easy size identification



**Secondary Velcro Brand Fastener** Located on the inside of the cuff, it prevents cuff telescoping during use, and improves cuff stability

**Offset Port Location** 

Velcro<sup>®</sup> Brand

**Application Handle** 

Easy to use and replaces

cumbersome ribbon ties

body so that pneumatic ports do not interfere with cuff application

#### **Reduces Skin Wrinkling & Pinching**

2-layer contour design replaces traditional 3-layer cylindrical cuff design, allowing for a thinner profile

## Away from the cuff

Provides a superior fit along both the proximal and distal edges of the cuff over traditional cylindrical cuffs<sup>2,4</sup>

**Contour Cuff Shape** 

Designed for comfortable, repeated use, Zimmer Biomet also offers reusable contour cuffs.

### **Cylindrical Cuffs and Cuff Sleeves**

## **Reusable and Disposable Cylindrical Cuffs**

These durable cuffs are designed to ensure enhanced performance and patient comfort. The wide variety of color-coded sizes makes it easy to meet even the most demanding procedural needs.

Zimmer Biomet disposable cuffs have been shown to have superior surface control than comparable disposable tourniquet cuffs.<sup>4</sup> Studies have shown that greater surface contact potentially reduces tourniquet inflation pressure.<sup>6,7</sup>

12 SPSB Sterile Cuff (with sleeve) 60707510500 (without sleeve) 60707510200

## **Cuff Sleeves**

## Specially designed to complement Zimmer Biomet cuffs and protect the patient from skin wrinkling and pinching.

Our limb protection sleeves have been found to be more effective at eliminating wrinkles and pinches in the skin surface as well as reducing the chance of folding or wrinkling of material under the cuff during application when compared to fourlayer stockinette and conventional cast padding.<sup>5</sup> All Zimmer Biomet protection sleeves are compatible with both cylindrical and contour cuffs.

8 inch Cuff Sleeve 6080000800 12 inch Cuff Sleeve 60800001200 18 inch Cuff Sleeve 60800002400 24 inch Cuff Sleeve 60800002400 30 inch Cuff Sleeve 60800003400 42 inch Cuff Sleeve 60800004200



#### **Tourniquet Systems and Accessories**

A.T.S.4000TS with Hoses	60400010100
A.T.S.4000TS with Cuffs and Hoses*	60400010200
A.T.S.4000 with Cuff Standard BSK Hose	60400010300
A.T.S.4000TS with Standard BSK/Hose	60400010400
A.T.S.2200TS with Hoses	60220010100
A.T.S.2200TS with Cuffs and Hoses**	60220010200
A.T.S.2200 with Cuff Standard BSK Hose	60220010300
A.T.S.2200TS with Standard BSK and Hose	60220010400

#### Accessories

Dual Sterile Extension Hose with LUER Lock Connector, Box of 20	60181200100
Dual Sterile Extension Hose with PLC Connector, Box of 20	60181210100
Single Sterile Extension Hose with LUER Lock Connector, Box of 20	60400900100
Single Sterile Extension Hose With PLC Connector, Box of 20	60400910100
A.T.S. 500/750/1200 Hose, Red/WE, each	60279000100
A.T.S. 500/750/1200 Hose, Blue/W, each	60279000200
A.T.S. 1500/2000/3000 Dual Port Hose, Blue/W, Each	60401700100
A.T.S. 1500/2000/3000 Dual Port Hose, Red/W, Each	60401800100
CPC-TO-LUER Adaptors, Box of 4	60730010500
A.T.S. Dual Hose Retrofit Kit, Box of 2	60750010000
A.T.S. 500 Single Hose Retrofit Kit, Each	60760010000
Red Universal Hose Adapters, Box of 2	60760030000
Blue Universal Hose Adapters, Box of 2	60760040000
O-Rings For Tourniquet Cuff, Box of 25	61730800000
LOP Sensor Kit	60300010500
Tourniquet Accessory Basket	60190800100
Tourniquet Stand, Telescoping, with 28 Base	60402200100
Calibration Hose Accessory Kit (dual port)	60400011000
Calibration Hose Accessory Kit (Single Port)	60220001455

#### Cuff Sleeves – Box of 10

8 in. Cuff Sleeve, Sterile	6080000800
12 in. Cuff Sleeve, Sterile	60800001200
18 in. Cuff Sleeve, Sterile	60800001800
24 in. Cuff Sleeve, Sterile	60800002400
30 in. Cuff Sleeve, Sterile	60800003000
34 in. Cuff Sleeve, Sterile	60800003400
42 in. Cuff Sleeve, Sterile	60800004200
Protective Sleeve/Contour Arm Cuff, Non-Sterile	60792000100
Protective Sleeve/Contour Thigh Cuff, Non-Sterile	60792000200
Protective Sleeve/Contour Leg Cuff, Non-Sterile	60792000300
Protective Sleeve/Extra-Small Adult, Non-sterile	60791000100
Protective Sleeve/ Small Adult, Non-sterile	60791000200

#### **Disposable Cuffs – Box of 10**

Contour Cuffs with Sleeves – Sterile (Dual Port, Single Bladder, PLC)		
18 x 4.5 in. DPSB Disposable Contour Cuff	60797015300	
24 x 4.5 in. DPSB Disposable Contour Cuff	60797015400	
30 x 4.5 in. DPSB Disposable Contour Cuff	60797015500	
34 x 4.5 in. DPSB Disposable Contour Cuff	60797015600	
44 x 4.5 in. DPSB Disposable Contour Cuff	60797015700	

\* Includes Dual Port, Single Bladder Reusable Cylindrical Cuffs; Qty 1 of 8", 12", 18", 24", 30", 34", 42"

\*\* Includes Single Port, Single Bladder Reusable Cylindrical Cuffs ; Qty 1 of 8", 12", 18", 24", 30", 34", 42"

#### Disposable Cuffs - Box of 10 (cont.)

<b>Contour Cuffs with Sleeves – Sterile</b>	
(Single Port, Single Bladder, PLC)	

18 x 4.5 in. SPSB Disposable Contour Cuff	60797515300
24 x 4.5 in. SPSB Disposable Contour Cuff	60797515400
30 x 4.5 in. SPSB Disposable Contour Cuff	60797515500
34 x 4.5 in. SPSB Disposable Contour Cuff	60797515600
44 x 4.5 in. SPSB Disposable Contour Cuff	60797515700

#### Contour Cuffs - Sterile (Dual Port, Single Bladder, PLC)

18 x 4.5 in. DPSB Disposable Contour Cuff	60797010300
24 x 4.5 in. DPSB Disposable Contour Cuff	60797010400
30 x 4.5 in. DPSB Disposable Contour Cuff	60797010500
34 x 4.5 in. DPSB Disposable Contour Cuff	60797010600
44 x 4.5 in. DPSB Disposable Contour Cuff	60797010700

#### **Contour Cuffs – Sterile (Single Port, Single Bladder, PLC)**

18 x 4.5 in. SPSB Disposable Contour Cuff	60797510300
24 x 4.5 in. SPSB Disposable Contour Cuff	60797510400
30 x 4.5 in. SPSB Disposable Contour Cuff	60797510500
34 x 4.5 in. SPSB Disposable Contour Cuff	60797510600
44 x 4.5 in. SPSB Disposable Contour Cuff	60797510700

#### Cylindrical Cuffs with Sleeves – Sterile (Dual Port, Single Bladder, PLC)

8 x 2.75 in. DPSB Sterile Disposable Cuff PLC	60707015100
12 x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707015200
18 x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707015300
24 x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707015400
30 x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707015500
34 x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707015600
42 x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707015700

#### Cylindrical Cuffs with Sleeves – Sterile (Single Port, Single Bladder, PLC)

12 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707515200
18 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707515300
24 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707515400
30 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707515500
34 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707515600
42 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707515700

#### Cylindrical Cuffs with Sleeves – Sterile (Dual Port, Dual Bladder, PLC)

18 x 5.5 in. DPDB Sterile Disposable Cuff PLC	60708015200
24 x 5.5 in. DPDB Sterile Disposable Cuff PLC	60708015300

#### Cylindrical Cuffs – Sterile (Dual Port, Single Bladder, PLC)

2.75 in. DPSB Sterile Disposable Cuff PLC	60707010100
x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707010200
x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707010300
x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707010400
x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707010500
x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707010600
x 4.125 in. DPSB Sterile Disposable Cuff PLC	60707010700

#### Cylindrical Cuffs – Sterile (Single Port, Single Bladder, PLC)

8 x 2.75 in. SPSB Sterile Disposable Cuff PLC	60707510100
12 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707510200
18 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707510300
24 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707510400
30 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707510500
34 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707510600
42 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60707510700

#### Disposable Cuffs – Box of 10 (cont.)

Cylindrical Cuffs – Sterile (Dual Port, Dual Bla	adder, PLC)
12 x 5.5 in. DPDB Sterile Disposable Cuff PLC	60708010100
18 x 5.5 in. DPDB Sterile Disposable Cuff PLC	60708010200
24 x 5.5 in. DPDB Sterile Disposable Cuff PLC	60708010300
Cylindrical Cuffs – Sterile (Single Port, Dual B	Bladder, PLC)
12 x 5.5 in. SPDB Sterile Disposable Cuff PLC	60708510100
18 x 5.5 in. SPDB Sterile Disposable Cuff PLC	60708510200
24 x 5.5 in. SPDB Sterile Disposable Cuff PLC	60708510300
Cylindrical Cuffs with Sleeves – Sterile (Dual Port, Single Bladder, Luer Lock)	
18 x 4.125 in. DPSB Sterile Disposable Cuff Luer Lock	60707005300
34 x 4.125 in. DPSB Sterile Disposable Cuff Luer Lock	60707005600
Cylindrical Cuffs with Sleeves – Sterile	
(Single Port, Single Bladder, Luer Lock)	
8 x 2.75 in. SPSB Sterile Disposable Cuff Luer Lock	60707505100
12 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707505200
18 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707505300
24 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707505400
30 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707505500
34 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707505600
Cylindrical Cuffs – Sterile	
(Dual Port, Single Bladder, Luer Lock)	
8 x 2.75 in. DPSB Sterile Disposable Cuff Luer Lock	60707000100
12 x 4.125 in. DPSB Sterile Disposable Cuff Luer Lock	60707000200
18 x 4.125 in. DPSB Sterile Disposable Cuff Luer Lock	60707000300
24 x 4.125 in. DPSB Sterile Disposable Cuff Luer Lock	60707000400
30 x 4.125 in. DPSB Sterile Disposable Cuff Luer Lock	60707000500
34 x 4.125 in. DPSB Sterile Disposable Cuff Luer Lock	60707000600
42 x 4.125 in. DPSB Sterile Disposable Cuff Luer Lock	60707000700
Cylindrical Cuffs – Sterile (Single Port, Single Bladder, Luer Lock)	
8 x 2.75 in. SPSB Sterile Disposable Cuff Luer Lock	60707500100
12 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707500200
18 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707500300
24 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707500400
30 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707500500
34 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707500600
42 x 4.125 in. SPSB Sterile Disposable Cuff Luer Lock	60707500700
Cylindrical Cuffs – Sterile (Dual Port, Dual Bladder, Luer Lock)	
12 x 5.5 in. DPDB Sterile Disposable Cuff Luer Lock	60708000100
18 x 5.5 in. DPDB Sterile Disposable Cuff Luer Lock	60708000200
24 x 5.5 in. DPDB Sterile Disposable Cuff Luer Lock	60708000300
Cylindrical Cuffs – Sterile	
(Single Port, Dual Bladder, Luer Lock)	
12 x 5.5 in. SPDB Sterile Disposable Cuff Luer Lock	60708500100
18 x 5.5 in. SPDB Sterile Disposable Cuff Luer Lock	60708500200
24 x 5.5 in. SPDB Sterile Disposable Cuff Luer Lock	60708500300

#### **Reusable Cuffs – Box of 1**

Reusable culls - Dox of 1			
Contour Cuffs with Sleeves – Non-Sterile (Dual Port, Single Bladder, PLC)			
9 in 21 in. DPSB Reusable Contour Upper Limb Cuff 12 in 30 in. DPSB Reusable Contour Thigh Cuff 9 in 17 in. DPSB Reusable Contour Lower Leg Cuff 30 in 39 in. DPSB Reusable Contour Cuff - XL	60745000200 60745000300 60745000400 60750000800		
Contour Cuffs with Sleeves – Non-Sterile (Single Port, Single Bladder, PLC)			
9 in 21 in. SPSB Reusable Contour Upper Limb Cuff 12 in 30 in. SPSB Reusable Contour Thigh Cuff 9 in 17 in. SPSB Reusable Contour Lower Leg Cuff 30 in 39 in. SPSB Reusable Contour Cuff - XL	60735000200 60735000300 60735000400 60760000800		
Contour Cuffs with Sleeves – Non-Sterile (Single Port, Dual Bladder, PLC)			
9 in 21 in. SPDB Reusable Contour Upper Limb IVRA Cuff	60735001100		
Contour Cuffs With Sleeves – Non-Sterile (Dual Port, Dual Bladder, PLC)			
9 in 21 in. DPDB Reusable Contour Upper Limb IVRA Cuff	60745001100		
Cylindrical Cuffs – Non-Sterile (Dual Port, Single Bladder, PLC)			
8 x 2.75 in. DPSB A.T.S. Cylindrical Cuff 12 x 4.125 in. DPSB A.T.S. Cylindrical Cuff 18 x 4.125 in. DPSB A.T.S. Cylindrical Cuff 24 x 4.125 in. DPSB A.T.S. Cylindrical Cuff 30 x 4.125 in. DPSB A.T.S. Cylindrical Cuff 34 x 4.125 in. DPSB A.T.S. Cylindrical Cuff 42 x 4.125 in. DPSB A.T.S. Cylindrical Cuff 14.9 x 3 in. DPSB Reusable Extra Small Adult Cuff 17.7 x 3.5 in. DPSB Reusable Small Adult Cuff	60750000100 60750000200 60750000300 60750000400 60750000500 60750000600 60750000700 60810000100 60810000200		
Cylindrical Cuffs – Non-Sterile (Single Port, Single Bladder			
8 x 2.75 in. SPSB A.T.S. Cylindrical Cuff 12 x 4.125 in. SPSB A.T.S. Cylindrical Cuff 18 x 4.125 in. SPSB A.T.S. Cylindrical Cuff 24 x 4.125 in. SPSB A.T.S. Cylindrical Cuff 30 x 4.125 in. SPSB A.T.S. Cylindrical Cuff 34 x 4.125 in. SPSB A.T.S. Cylindrical Cuff 42 x 4.125 in. SPSB A.T.S. Cylindrical Cuff 14.9 x 3 in. SPSB Extra Small Adult Cuff 17.7 x 3.5 in. SPSB Small Adult Cuff	60760000100 60760000200 60760000300 60760000400 60760000500 60760000600 60760000700 60800000100 60800000200		
Cylindrical Cuffs – Non-Sterile (Single Port, Dual B	ladder, PLC)		
12 x 5.5 in. SPDB A.T.S. Cylindrical Cuff 18 x 5.5 in. SPDB A.T.S. Cylindrical Cuff 24 x 5.5 in. SPDB A.T.S. Cylindrical Cuff	60766600100 60766600200 60766600300		

#### Cylindrical Cuffs – Non-Sterile (Dual Port, Dual Bladder, PLC)

12 x 5.5 in. DPDB A.T.S. Cylindrical Cuff	60755500100
18 x 5.5 in. DPDB A.T.S. Cylindrical Cuff	60755500200
24 x 5.5 in. DPDB A.T.S. Cylindrical Cuff	60755500300

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#### **Service and Warranty Programs**

Do you have coverage on your Tourniquet capital equipment? Learn more at **service.zimmer.com.** 

#### **Clinical Support**

The Zimmer Biomet Clinical Excellence Team consists of Perioperative Nurses who provide product education, training and support for Tourniquet products. For more information about the Clinical Excellence Team please contact **SurgicalSales-ClinicalExcellence@zimmerbiomet.com** 

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