

Tourniquet Systems

A Personal Focus, A Personalized Fit



Personalized Pressure™ Technology

The only tourniquet system on the market with a calculated response for Personalized Pressure Technology. No two patients are the same – that’s why our market-leading tourniquet system treats every patient with precise, Personalized Pressure Technology.

The Zimmer® A.T.S.® 4000 Tourniquet System doesn’t just stop blood flow; we strive 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 TKA.¹

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 350mmHG.²

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



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



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



Tourniquet Systems to Meet Your OR Needs

	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 Ion 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
Limb Occlusion Pressure	Yes	No
Line Occlusion Detection (Acoustic Reflectometry)	Yes	Yes
Cuff Alert	Yes	Yes
Automatic IVRA Cuff Lock Out	Yes	Yes
Advanced Leak Detection	Yes	Yes
Pre-Op Cuff Test	Yes	Yes

A.T.S.® Contour and Reuseable Cuffs

Versatility and flexibility for both the OR staff and the patient

- **Designed to Fit Most Adult Patients** for arm, thigh, lower leg and Bier Block (IVRA) applications
- **Unique, Proprietary Pivoting Straps** with contour design adjust to a wide range of limb shapes and sizes, including conically shaped limbs
- **Slim, Low-Profile Design** provides superior fit and performance on tapered limbs⁴
- **Wider Than Other Cuffs** to help provide improved application of pressure to the operative limb. Durable and easily cleaned for multiple uses



Previous studies have shown that wide and wide contoured tourniquet cuffs occlude flow at lower pressures than narrow cuffs. For tapered limbs, contouring the cuff to match the conical shape of the limb has been shown to reduce limb occlusion pressure.⁴

Designed for comfortable, repeated use

- **90-Degree Ports** help keep hoses clear of the surgical site
- **Contact Closures and Fasteners** hold the cuff securely in position by virtually eliminating rolling and twisting
- **Single/Dual Port Options** allow for use with any A.T.S. tourniquet regulator



24 SPSB Reusable Cuff 60760000400

30 SPSB Reusable Cuff 60760000500

Low profile, high performance

These durable, latex-free sterile cuffs are designed and manufactured to ensure enhanced performance and patient comfort, while providing single use convenience. The wide variety of color-coded sizes makes it easy to meet even the most demanding procedural needs.

- **90-Degree Ports** help keep hoses clear of the surgical site
- **Contact Closures and Fasteners** hold the cuff securely in position by virtually eliminating rolling and twisting
- **Single/Dual Port Options** allow for use with any A.T.S. tourniquet regulator
- **No Cleaning**, no cross-contamination – just discard after use
- **Single/Dual Bladder Options** offer convenient choices for cuff style and sizing, including use with intravenous regional anesthesia IVRA or Bier Block procedures

Zimmer Biomet disposable cuffs have been shown to have superior surface contact than comparable^{7,4} disposable tourniquet cuffs. Studies have shown that greater surface contact potentially reduces tourniquet inflation pressure.^{5,6}

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



Protection Sleeves

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

Zimmer Biomet 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 four-layer stockinet and conventional cast padding.⁷

- 8 inch Cuff Sleeve 6080000800
- 12 inch Cuff Sleeve 60800001200
- 18 inch Cuff Sleeve 60800001800
- 24 inch Cuff Sleeve 60800002400
- 30 inch Cuff Sleeve 60800003000
- 34 inch Cuff Sleeve 60800003400
- 42 inch Cuff Sleeve 60800004200



Additional Products Not Shown

Tourniquets

60400010200	A.T.S. 4000 Tourniquet w/ Hoses & Cuffs
60400010300	A.T.S. 4000 Tourniquet w/ Hoses, Cuffs, Stand, Basket
60400010400	A.T.S. 4000 Tourniquet w/ Hoses Stand, Basket
60220010200	A.T.S. 2200 Tourniquet w/ Hoses & Cuffs
60220010300	A.T.S. 2200 Tourniquet w/ Hoses, Cuffs, Stand, Basket
60220010400	A.T.S. 2200 Tourniquet w/ Hoses, Stand, Basket
60190800100	Tourniquet Accessory Basket
60402200100	Tourniquet Stand, Telescoping, W/ 28 Base
60401700100	Blue Hose
60401800100	A.T.S. 3000/4000 Dual Hose, Red
60400010500	A.T.S. 4000 LOP Sensor
60279000100	A.T.S. 750/1200/2200 Hose, Red
60279000200	A.T.S. 750/1200/2200 Hose, Blue

Dual Port, Single Bladder, PLC, Box of 1

60745000200	9 in. – 21 in. DPSB Reusable Contour Cuff Upper Limb (with sleeve)
60745000300	12 in. – 30 in. DPSB Reusable Contour Cuff Thigh (with sleeve)
60750000800	30 in. – 39 in. DPSB Reusable Contour Cuff Thigh (without sleeve)
60745000400	9 in. – 17 in. DPSB Reusable Contour Cuff Lower Leg (with sleeve)

Dual Port, Dual Bladder, PLC, Box of 1

60745001100	9 in. – 21 in. DPDB Reusable Contour Cuff IVRA (with sleeve)
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Single Port, Single Bladder, PLC, Box of 1

60735000300	12 in. – 30 in. SPSB Reusable Contour Cuff Thigh (with sleeve)
60735000400	9 in. – 17 in. SPSB Reusable Contour Cuff Lower Leg (with sleeve)
60760000800	30 in. – 39 in. SPSB Reusable Contour Cuff LRG Leg (without sleeve)

Single Port, Dual Bladder, PLC, Box of 1

60735001100	9 in. – 21 in. SPDB Reusable Contour Cuff IVRA (with sleeve)
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Dual Port, Single Bladder, PLC, Box of 1

60750000100	8 DPSB Reusable Cuff (without sleeve)
60750000200	12 DPSB Reusable Cuff (without sleeve)
60750000300	18 DPSB Reusable Cuff (without sleeve)
60750000400	24 DPSB Reusable Cuff (without sleeve)
60750000500	30 DPSB Reusable Cuff (without sleeve)
60750000600	34 DPSB Reusable Cuff (without sleeve)
60750000700	42 DPSB Reusable Cuff (without sleeve)
60810000100	Extra SM Adult Reusable Cuff (with sleeve)
60810000200	Small Adult Reusable Cuff (with sleeve)

Dual Port, Dual Bladder, PLC, Box of 1

60755500100	12 DPDB Reusable Cuff (without sleeve)
60755500200	18 DPDB Reusable Cuff (without sleeve)
60755500300	24 DPDB Reusable Cuff (without sleeve)

Single Port, Single Bladder, PLC, Box of 1

60760000100	8 SPSB Reusable Cuff (without sleeve)
60760000200	12 SPSB Reusable Cuff (without sleeve)
60760000300	18 SPSB Reusable Cuff (without sleeve)
60760000400	24 SPSB Reusable Cuff (without sleeve)
60760000500	30 SPSB Reusable Cuff (without sleeve)
60760000600	34 SPSB Reusable Cuff (without sleeve)
60760000700	42 SPSB Reusable Cuff (without sleeve)
60800000100	Extra SM Adult Reusable Cuff (with sleeve)
60800000200	Small Adult Reusable Cuff (with sleeve)

Single Port, Dual Bladder, PLC, Box of 1

60766600100	12 SPDB Reusable Cuff (without sleeve)
60766600200	18 SPDB Reusable Cuff (without sleeve)
60766600300	24 SPDB Reusable Cuff (without sleeve)

Dual Port, Single Bladder, Sterile, Disposable, PLC, Box of 10

8 DPSB Sterile Cuff	(with sleeve) 60707015100 (without sleeve) 60707010100
12 DPSB Sterile Cuff	(with sleeve) 60707015200 (without sleeve) 60707010200
18 DPSB Sterile Cuff	(with sleeve) 60707015300 (without sleeve) 60707010300
24 DPSB Sterile Cuff	(with sleeve) 60707015400 (without sleeve) 60707010400
30 DPSB Sterile Cuff	(with sleeve) 60707015500 (without sleeve) 60707010500
34 DPSB Sterile Cuff	(with sleeve) 60707015600 (without sleeve) 60707010600
42 DPSB Sterile Cuff	(with sleeve) 60707015700 (without sleeve) 60707010700

Dual Port, Dual Bladder, Sterile, PLC, Box of 10

12 DPDB Sterile Cuff	(without sleeve) 60708010100
18 DPDB Sterile Cuff	(with sleeve) 60708015200 (without sleeve) 60708010200
24 DPDB Sterile Cuff	(with sleeve) 60708015300 (without sleeve) 60708010300

Dual Port, Single Bladder, Sterile, Luer Lock, Box of 10

8 DPDB Sterile Cuff	(without sleeve) 60707000100
12 DPDB Sterile Cuff	(without sleeve) 60707000200
18 DPDB Sterile Cuff	(with sleeve) 60707005300 (without sleeve) 60707000300
24 DPDB Sterile Cuff	(without sleeve) 60707000400
30 DPDB Sterile Cuff	(without sleeve) 60707000500
34 DPDB Sterile Cuff	(with sleeve) 60707005600 (without sleeve) 60707000600
42 DPDB Sterile Cuff	(without sleeve) 60707000700

Dual Port, Dual Bladder, Sterile, Luer Lock, Box of 10

12 DPDB Sterile Cuff	(without sleeve) 60708000100
18 DPDB Sterile Cuff	(without sleeve) 60708000200
24 DPDB Sterile Cuff	(without sleeve) 60708000300

Single Port, Single Bladder, PLC, Box of 10

8 SPSB Sterile Cuff	(without sleeve) 60707510100
12 SPSB Sterile Cuff	(without sleeve) 60707510200 (with sleeve) 60707515200
18 SPSB Sterile Cuff	(with sleeve) 60707515300 (without sleeve) 60707510300
24 SPSB Sterile Cuff	(with sleeve) 60707515400 (without sleeve) 60707510400
30 SPSB Sterile Cuff	(with sleeve) 60707515500 (without sleeve) 60707510500
34 SPSB Sterile Cuff	(with sleeve) 60707515600 (without sleeve) 60707510600
42 SPSB Sterile Cuff	(with sleeve) 60707515700 (without sleeve) 60707510700

Single Port, Dual Bladder, Sterile, PLC, Box of 10

12 SPDB Sterile Cuff	(without sleeve) 60708510100
18 SPDB Sterile Cuff	(without sleeve) 60708510200
24 SPDB Sterile Cuff	(without sleeve) 60708510300

Single Port, Single Bladder, Sterile, Luer Lock, Box of 10

8 SPSB Sterile Cuff	(with sleeve) 60707505100 (without sleeve) 60707500100
12 SPSB Sterile Cuff	(with sleeve) 60707505200 (without sleeve) 60707500200
18 SPSB Sterile Cuff	(with sleeve) 60707505300 (without sleeve) 60707500300
24 SPSB Sterile Cuff	(with sleeve) 60707505400 (without sleeve) 60707500400
30 SPSB Sterile Cuff	(with sleeve) 60707505500 (without sleeve) 60707500500
34 SPSB Sterile Cuff	(with sleeve) 60707505600 (without sleeve) 60707500600
42 SPSB Sterile Cuff	(without sleeve) 60707500700

Single Port, Dual Bladder, Sterile, Luer Lock, Box of 10

12 SPDB Sterile Cuff	(without sleeve) 60708500100
18 SPDB Sterile Cuff	(without sleeve) 60708500200
24 SPDB Sterile Cuff	(without sleeve) 60708500300

Tourniquet Cuff – Limb Protection Sleeve For Small Adult Cuffs & Reusable Contour, Non-Sterile, Box of 10

60791000100	X-SM Adult
60791000200	SM Adult
60792000100	Contour Arm Cuff
60792000200	Contour Thigh Cuff
60792000300	Contour Leg Cuff

Tourniquet Cuff – Accessories**Hose Extensions, Sterile, Box of 20**

60181210100	36 in. Sterile Dual Hose Extension PLC
60181200100	36 in. Sterile Dual Hose Extension Luer
60400910100	36 in. Sterile Single Hose Extension PLC
60400900100	36 in. Sterile Single Hose Extension Luer

References

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2. Worland, RL; Arredondo, J; Angles, F; Lopez-Jimenez, F; Jessup, DE: Thigh pain following tourniquet application in simultaneous bilateral total knee replacement arthroplasty. *J Arthroplasty*. 12(8):848 – 52,1997.
3. Noordin S, McEwen JA, Kragh JF Jr, Eisen A, Masri BA. Surgical tourniquets in orthopaedics. *J Bone Joint Surg Am*. 2009 Dec;91(12):2958-67.
4. Younger ASE, McEwen JA, Inkpen K. Wide contoured thigh cuffs and automated limb occlusion measurement allow lower tourniquet pressures. *Clin Orthop*. November 2004; (428):286-293
5. Heston B. Tourniquet Pressure Mapping: Visually Analyzing Tourniquet Cuff Efficiency Using Tekscan Pressure Measuring. Report on file, Zimmer Surgical, Inc., Dover, OH 2010
6. AORN, recommended practices for use of the pneumatic tourniquet. In: *Perioperative standards and recommended practices*. 2014 ed. Denver, CO: AORN, Inc.; 2014. p 183-208
7. "New Limb Protection Sleeves: For Zimmer A.T.S. Automatic Tourniquet Systems." Zimmer Surgical, Dover, OH. Report on file, Zimmer Surgical, Inc., Dover, OH 2004



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CSTAR™ Service and Repair Programs

CSTAR service programs offer a broad range of services to keep your Zimmer Biomet Tourniquet capital at peak condition over its designed lifetime. Our highly trained technicians are available for full service support. Additionally, daily use and maintenance training is available for hospital personnel upon request at no additional cost. For access to the support of trusted experts, visit service.zimmer.com.

The Zimmer Biomet sales force is relied upon in Operating Rooms around the country every day. Being a Zimmer Biomet customer means you're connected to knowledgeable and trained experts.

Contact your Zimmer Biomet representative or visit us at www.surgical.zimmer.com.



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