

Tourniquet Systems

A Personal Focus. A Personalized Fit.



Tourniquet Capital Equipment

A.T.S.[®] 5000 and A.T.S.[®] 3200 Tourniquet Systems

Zimmer Biomet's Tourniquet Portfolio makes personalization a priority. Designed with efficiency in mind, our inclusive catalog of dual and single-port tourniquet systems, accessories and cuffs provide a comprehensive selection of options to help prioritize patient comfort while seeking to address the varied needs of surgeons and healthcare facilities.



A.T.S. 5000 Tourniquet System

The A.T.S. 5000 Tourniquet System delivers a personalized experience for both patients and healthcare providers.

Combining customizable surgeon profiles with Personalized Pressure® Technology and multiple ways to measure Limb Occlusion Pressure (LOP), our dual-port tourniquet system is designed to equip surgeons with efficient tools. These features help support the goal of delivering the minimum required tourniquet pressure to help minimize post-operative pain, while maintaining a bloodless surgical field.¹

EZ Method for Measuring Limb Occlusion Pressure (LOP)

The EZ Method allows surgeons to perform LOP measurements with no additional sensor. The integrated barcode scanner automatically recognizes disposable dual-port cuffs identified as EZ LOP compatible by scanning the cuff's barcode. Without the need to utilize a non-sterile sensor, workflow is simplified.³ Additionally, EZ Method offers the ability to perform the measurement closer to tourniquet cuff inflation.

Personalized Pressure Technology

Personalized Pressure Technology determines the minimum amount of tourniquet pressure required based on the patient's particular anatomy and can help OR Staff choose a more individualized, often lower, tourniquet pressure.¹ One study demonstrated that applying lower tourniquet pressure resulted in less post-operative pain for patients.^{2*}

*The A.T.S. 5000 was not used in this study.



Advanced IV Pole Kit and Roll Stand Kit

Our tourniquet systems can be paired with our durable Roll Stand and IV Pole Kits. Each stand includes an accessory basket and features 360-degree spin, adjustable cord locks to avoid tangling, a convenient handle for easy movement and locks on each wheel to avoid involuntary movement in the OR.





A.T.S. 5000 Features

Protocols (1) - Allows for customization of pressure, time, LOP, safety margins** and deflation preferences.

Safety Margins (2)** - The A.T.S. 5000 considers anticipated changes in blood pressure during the procedure by adding an additional safety margin to the LOP value at the end of the LOP determination.

EZ Method Cuff Barcode Scanner (3) - Automatically recognizes cuffs identified as “EZ LOP Ready” by scanning the cuff’s barcode. The cuff details are displayed on the screen for review.

Dual Port Technology (4) - One port is dedicated to inflating and deflating the cuff and the other is dedicated to monitoring pressure.

Distal LOP Sensor (5) - Identifies signal quality in 1-2 seconds and includes an on-sensor quality indicator, plus an option for remote initiation of LOP measurement.

Customize Your Preferences with Protocols

With just two touches on the home screen, surgeons can access Protocols and create their personalized profile. Pressure, time, LOP, safety margins** and deflation preferences can now be customized beyond the device’s default settings.

Deflation Protocols offer two pre-programmed sequences of pressure regulation

Cyclic Deflation

Cycles between the inflated pressure setpoint and fully deflated setpoint states allowing a brief reperfusion of the limb and control of metabolites prior to the end of the procedure

Step Deflation

Decreases the cuff pressure by 50 mmHg until the cuff is fully deflated, which can allow for the surgeon to check for bleeding vessels prior to complete deflation

**The A.T.S. 5000 will take into account anticipated changes in blood pressure during the procedure by adding an additional safety margin to the LOP value at the end of the LOP determination. “Custom” safety margins can be user-selectable in the protocols between 50 mmHg and 100 mmHg.



A.T.S. 5000 Tourniquet
w/ Hoses 60500010100



A.T.S. 3200 Tourniquet
w/ Hoses 60320010100

System Features and Benefits

	Zimmer A.T.S. 5000	Zimmer A.T.S. 3200
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	10.1" Color	8.0" Color
Minimum/Maximum Pressure	20/600 mmHg	20/600 mmHg
Pressure Accuracy	±3 mmHg (20–600 mmHg)	±4 mmHg (20–600 mmHg)
Limb Occlusion Pressure (LOP) ▼ Allows for patient-specific pressure, which allows for the minimum pressure to be used.	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.	Yes	Yes
Cuff Alert ▼ 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 intra-operatively 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

Cylindrical Cuffs and Cuff Sleeves

Reusable and Disposable Cylindrical Cuffs

These durable cuffs are designed for performance and patient comfort. The wide variety of color-coded sizes offers various options to help address demanding procedural needs.

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

A.T.S. Cylindrical Disposable Cuffs



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 four-layer stockinette and conventional cast padding.⁷ All Zimmer Biomet protection sleeves are compatible with both cylindrical and contour cuffs.

Limb Protection Sleeves

Disposable, Sterile, Box of 10

- 60-8000-008-00 8 in. (20 cm)
- 60-8000-012-00 12 in. (30 cm)
- 60-8000-018-00 18 in. (46 cm)
- 60-8000-024-00 24 in. (61 cm)
- 60-8000-030-00 30 in. (76 cm)
- 60-8000-034-00 34 in. (86 cm)
- 60-8000-042-00 42 in. (107 cm)

Non-Sterile, Box of 10

- 60-7910-001-00 X-SM Adult (8 cm)
- 60-7910-002-00 SM Adult (9 cm)
- 60-7920-001-00 Contour Arm Cuff Sleeve
- 60-7920-002-00 Contour Thigh Cuff Sleeve
- 60-7920-003-00 Contour Leg Cuff Sleeve



Ordering Information

Tourniquet Systems and Accessories

A.T.S. 5000TS with Hoses	60500010100
A.T.S. 3200TS with Hoses	60320010100

Accessories

Dual Sterile Extension Hose with PLC Connector, Box of 20	60-1812-101-00
Single Sterile Extension Hose With PLC Connector, Box of 20	60-4009-101-00
Single Hose A.T.S Red/White	60-2790-001-00
Single Hose A.T.S Blue/White	60-2790-002-00
Dual Hose A.T.S Blue/White	60-4017-001-00
Dual Hose A.T.S. Red/White	60-4018-001-00
Red Universal Hose Adapters, Box of 2	60-7600-300-00
Blue Universal Hose Adapters, Box of 2	60-7600-400-00
O-Rings For Tourniquet Cuff, Box of 25	61-7308-000-00
A.T.S. 5000 LOP Sensor Replacement	60500090300
Tourniquet Advanced IV Pole Kit	60190900100
Tourniquet Roll Stand Kit	60190900110
Tourniquet IV Pole/Roll Stand Replacement Handle	60190900120
Tourniquet IV Pole/Roll Stand Replacement Caster	60190900130
Tourniquet Power Cord Hook	60190900140
Tourniquet IV Pole/Roll Stand Replacement Accessory Basket	60190900150
Tourniquet IV Pole/Roll Stand Replacement Cord Clips	60190900160
POWER CORD PACK CEURO-KOR	60-4600-001-00
POWER CORD PACKBRI-HK-SG	60-4600-002-00
POWER CORD PACK SWISS	60-4600-003-00
POWER CORD PACK AUSTRALIA	60-4600-006-00
POWER CORD PACK JAPAN-TAI	60-4600-007-00
POWER CORD PACK INDIA-SAF	60-4600-008-00
POWER CORD PACK CHINA	60-4600-010-00
POWER CORD PACK BRAZIL	60-4600-011-00
POWER CORD PACK DENMARK	60-4600-012-00
Replacement Battery	60-4000-702-00

Cuff Sleeves – Box of 10

8 in. Cuff Sleeve, Sterile	60-8000-008-00
12 in. Cuff Sleeve, Sterile	60-8000-012-00
18 in. Cuff Sleeve, Sterile	60-8000-018-00
24 in. Cuff Sleeve, Sterile	60-8000-024-00
30 in. Cuff Sleeve, Sterile	60-8000-030-00
34 in. Cuff Sleeve, Sterile	60-8000-034-00
42 in. Cuff Sleeve, Sterile	60-8000-042-00
Protective Sleeve/Contour Arm Cuff, Non-Sterile	60-7920-001-00
Protective Sleeve/Contour Thigh Cuff, Non-Sterile	60-7920-002-00
Protective Sleeve/Contour Leg Cuff, Non-Sterile	60-7920-003-00
Protective Sleeve/Extra-Small Adult, Non-sterile	60-7910-001-00
Protective Sleeve/ Small Adult, Non-sterile	60-7910-002-00

Disposable Cuffs – Box of 10

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

8 x 2.75 in. DPSB Sterile Disposable Cuff PLC	60-7070-151-00
12 x 4.125 in. DPSB Sterile Disposable Cuff PLC	60-7070-152-00
18 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-153-00
24 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-154-00
30 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-155-00
34 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-156-00
42 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-157-00

*Compatible with EZ LOP Method

Disposable Cuffs – Box of 10 (cont.)

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

12 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-152-00
18 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-153-00
24 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-154-00
30 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-155-00
34 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-156-00
42 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-157-00

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

18 x 5.5 in. DPDB Sterile Disposable Cuff PLC*	60-7080-152-00
24 x 5.5 in. DPDB Sterile Disposable Cuff PLC*	60-7080-153-00

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

8 x 2.75 in. DPSB Sterile Disposable Cuff PLC	60-7070-101-00
12 x 4.125 in. DPSB Sterile Disposable Cuff PLC	60-7070-102-00
18 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-103-00
24 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-104-00
30 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-105-00
34 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-106-00
42 x 4.125 in. DPSB Sterile Disposable Cuff PLC*	60-7070-107-00

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

8 x 2.75 in. SPSB Sterile Disposable Cuff PLC	60-7075-101-00
12 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-102-00
18 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-103-00
24 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-104-00
30 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-105-00
34 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-106-00
42 x 4.125 in. SPSB Sterile Disposable Cuff PLC	60-7075-107-00

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

12 x 5.5 in. DPDB Sterile Disposable Cuff PLC	60-7080-101-00
18 x 5.5 in. DPDB Sterile Disposable Cuff PLC*	60-7080-102-00
24 x 5.5 in. DPDB Sterile Disposable Cuff PLC*	60-7080-103-00

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

18 x 5.5 in. SPDB Sterile Disposable Cuff PLC	60-7085-102-00
24 x 5.5 in. SPDB Sterile Disposable Cuff PLC	60-7085-103-00

Pediatric Cuffs with Sleeves - Sterile (Dual Port, Single Bladder)

7.25 x 1.75 in. DPSB Sterile Disposable Pediatric Cuff	60-9800-001-00
10.5 x 2.25 in. DPSB Sterile Disposable Pediatric Cuff	60-9800-002-00
15 x 3 in. DPSB Sterile Disposable Pediatric Cuff	60-9800-003-00
17.5 x 3.50 in. DPSB Sterile Disposable Pediatric Cuff:	60-9800-004-00

Pediatric Cuffs with Sleeves - Sterile (Single Port, Single Bladder)

7.25 x 1.75 in. SPSB Sterile Disposable Pediatric Cuff	60-9700-001-00
10.5 x 2.25 in. SPSB Sterile Disposable Pediatric Cuff	60-9700-002-00
15 x 3 in. SPSB Sterile Disposable Pediatric Cuff	60-9700-003-00
17.5 x 3.50 in. SPSB Sterile Disposable Pediatric Cuff	60-9700-004-00

Contour Disposable Cuffs with Sleeves-Sterile (Dual Port, Single Bladder)

Variable Contour Arm Cuff	60-9400-002-00
Variable Contour Thigh Cuff	60-9400-003-00
Variable Contour Leg Cuff	60-9400-004-00

Contour Disposable Cuffs with Sleeves-Sterile (Single Port, Single Bladder)

Variable Contour Arm Cuff	60-9300-002-00
Variable Contour Thigh Cuff	60-9300-003-00
Variable Contour Leg Cuff	60-9300-004-00

Available products vary by region/country. Please contact your local representative for further information regarding product registrations.

Ordering Information (cont.)

Reusable Cuffs – Box of 1

Contour Cuffs with Sleeves – Non-Sterile (Dual Port, Single Bladder, PLC)

9 in. - 21 in. DPSB Reusable Contour Upper Limb Cuff	60-7450-002-00
12 in. - 30 in. DPSB Reusable Contour Thigh Cuff	60-7450-003-00
9 in. - 17 in. DPSB Reusable Contour Lower Leg Cuff	60-7450-004-00

Contour Cuffs with Sleeves – Non-Sterile (Single Port, Single Bladder, PLC)

9 in. - 21 in. SPSB Reusable Contour Upper Limb Cuff	60-7350-002-00
12 in. - 30 in. SPSB Reusable Contour Thigh Cuff	60-7350-003-00
9 in. - 17 in. SPSB Reusable Contour Lower Leg Cuff	60-7350-004-00

Contour Cuffs with Sleeves – Non-Sterile (Single Port, Dual Bladder, PLC)

9 in. - 21 in. SPDB Reusable Contour Upper Limb IVRA Cuff	60-7350-011-00
---	----------------

Contour Cuffs with Sleeves – Non-Sterile (Dual Port, Dual Bladder, PLC)

9 in. - 21 in. DPDB Reusable Contour Upper Limb IVRA Cuff	60-7450-011-00
---	----------------

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

8 x 2.75 in. DPSB A.T.S. Cylindrical Cuff	60-7500-001-00
12 x 4.125 in. DPSB A.T.S. Cylindrical Cuff	60-7500-002-00
18 x 4.125 in. DPSB A.T.S. Cylindrical Cuff	60-7500-003-00
24 x 4.125 in. DPSB A.T.S. Cylindrical Cuff	60-7500-004-00
30 x 4.125 in. DPSB A.T.S. Cylindrical Cuff	60-7500-005-00
34 x 4.125 in. DPSB A.T.S. Cylindrical Cuff	60-7500-006-00
42 x 4.125 in. DPSB A.T.S. Cylindrical Cuff	60-7500-007-00

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

14.9 x 3 in. DPSB Reusable Extra Small Adult Cuff	60-8100-001-00
17.7 x 3.5 in. DPSB Reusable Small Adult Cuff	60-8100-002-00

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

8 x 2.75 in. SPSB A.T.S. Cylindrical Cuff	60-7600-001-00
12 x 4.125 in. SPSB A.T.S. Cylindrical Cuff	60-7600-002-00
18 x 4.125 in. SPSB A.T.S. Cylindrical Cuff	60-7600-003-00
24 x 4.125 in. SPSB A.T.S. Cylindrical Cuff	60-7600-004-00
30 x 4.125 in. SPSB A.T.S. Cylindrical Cuff	60-7600-005-00
34 x 4.125 in. SPSB A.T.S. Cylindrical Cuff	60-7600-006-00
42 x 4.125 in. SPSB A.T.S. Cylindrical Cuff	60-7600-007-00

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

14.9 x 3 in. SPSB Extra Small Adult Cuff	60-8000-001-00
17.7 x 3.5 in. SPSB Small Adult Cuff	60-8000-002-00

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

12 x 5.5 in. SPDB A.T.S. Cylindrical Cuff	60-7666-001-00
18 x 5.5 in. SPDB A.T.S. Cylindrical Cuff	60-7666-002-00
24 x 5.5 in. SPDB A.T.S. Cylindrical Cuff	60-7666-003-00

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

12 x 5.5 in. DPDB A.T.S. Cylindrical Cuff	60-7555-001-00
18 x 5.5 in. DPDB A.T.S. Cylindrical Cuff	60-7555-002-00
24 x 5.5 in. DPDB A.T.S. Cylindrical Cuff	60-7555-003-00

Available products vary by region/country. Please contact your local representative for further information regarding product registrations.

References

1. Olivecrona C, Ponzer S, Hamberg P, Blomfeldt R. Lower tourniquet cuff pressure reduces postoperative wound complications after total knee arthroplasty: a randomized controlled study of 164 patients. *J Bone Joint Surg Am.* 2012 Dec 19;94(24):2216-21.
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. Internal TR-1774, ATS 5000 EZ LOP Verification r1.0, 2021.
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

Laboratory reports are not necessarily indicative of clinical performance. ^{3,5,7}

Service and Warranty Programs

Do you have coverage on your Tourniquet capital equipment? Reach out to your Zimmer Biomet representative for more information.

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 your Zimmer Biomet representative.



Legal Manufacturer
Zimmer Surgical, Inc.
200 West Ohio Avenue
Dover, Ohio 44622 U.S.A.
(800) 830-0970



Legal Manufacturer
Delfi Medical Innovations Inc.
106-1099 West 8th Ave.
Vancouver, BC V6H 1C3
Canada

www.zimmerbiomet.com



ZIMMER BIOMET

Velcro® is a trademark of Velcro BVBA

All content herein is protected by copyright, trademarks and other intellectual property rights, as applicable, owned by or licensed to Zimmer Biomet or its affiliates unless otherwise indicated, and must not be redistributed, duplicated or disclosed, in whole or in part, without the express written consent of Zimmer Biomet. This documentation is intended exclusively for physicians and is not intended for laypersons. Information on the products and procedures contained in this document is of a general nature and does not purport to constitute any diagnostic or therapeutic statement with regard to any individual medical case, each patient must be examined and advised individually, and this document does not replace the need for such examination and/or advice in whole or in part. Please refer to the package insert and user manual for important product information, including, but not limited to, indications, contraindications, warning, precautions, and adverse effects. Check for country product clearances and reference product-specific instructions for use. Not for distribution in France.