CODAN

Reservoir XL

Safety and flexibility during
invasive blood pressure monitoring

The decisive connection

CODAN

Reservoir XL

Closed blood sampling systems from CODAN

Closed blood sampling systems from CODAN pvb Critical Care were developed specially for taking arterial blood samples during invasive blood pressure monitoring.

Comprising a reservoir system and sampling ports with disinfectable membranes, the sampling system offers clear advantages compared to traditional sampling components[1].

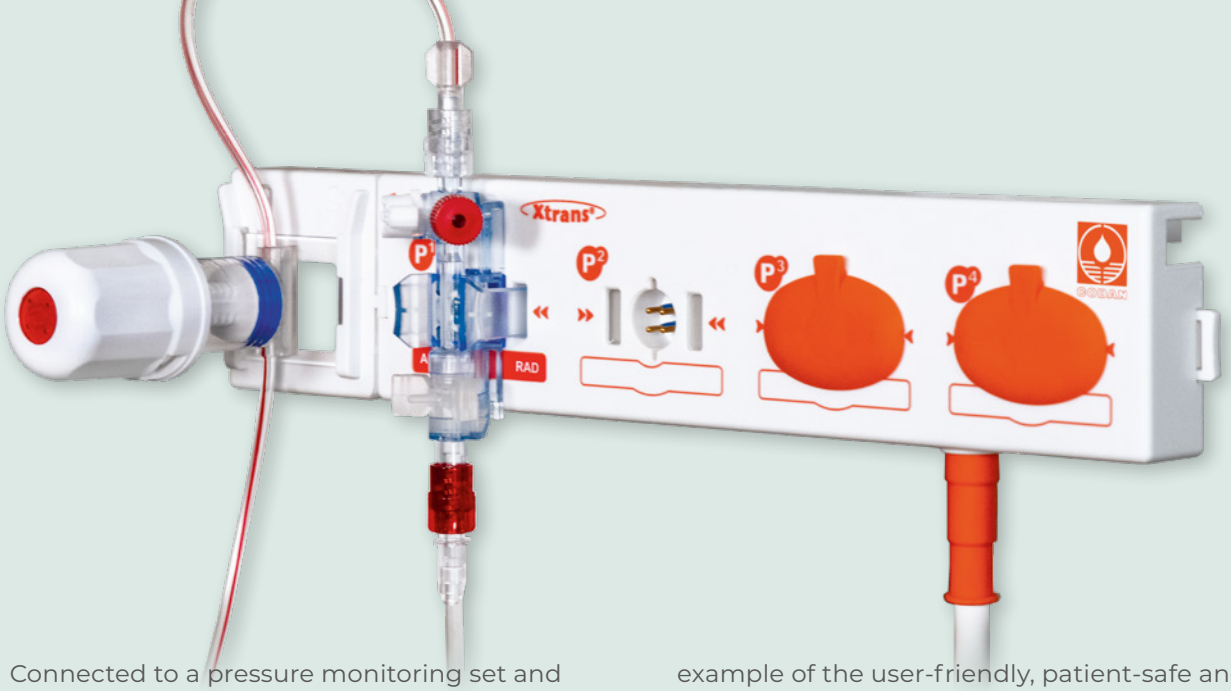
Optimised workflow

These blood sampling systems enable the user to work safely, reliably and efficiently. Due to the integrated reservoir systems, the mixing volume can be easily withdrawn within the tubing system of a pressure monitoring set in order to subsequently take blood samples for laboratory diagnostics.

Unnecessary application steps and the use of additional withdrawal containers for the removal of the mixing volume are saved here.

At a glance

- Reservoir with 6 ml volume and bacteria filter as well as scaling in ml increments
- Blood sampling system optionally with one or two integrated sampling ports
- For point-of-care and/or remote blood sampling
- Colour-coded red for reliable identification of arterial application
- Available in a variety of practical and user-friendly pressure monitoring sets



Connected to a pressure monitoring set and mounted on a mounting plate next to the pressure transducer, the Reservoir XL is an excellent example of the user-friendly, patient-safe and economical way of blood sampling.
Cover caps are available for unused ports.

Patient Blood Management

For critically ill patients in particular, blood is an extremely valuable resource that needs to be handled responsibly at all times. Closed blood sampling systems are a recognised way of reducing patient blood loss in intensive care and anaesthesia[1-4].

Due to CODAN's integrated reservoir systems, blood samples can be taken without discarding mixed volumes. This blood-saving concept has been shown to significantly reduce blood loss in intensive care patients[4], thus protecting not only the patient's health but also the hospital from unnecessary costs[1,5].

Protection from pathogens
The sampling ports of CODAN's closed blood sampling systems are equipped with disinfectable membranes. Such sampling ports offer improved protection against pathogens compared to conventional three-way stopcocks, thereby reducing the incidence of both internal and external system contamination[1,6,7].

Sources
1. Westphal S, Zacharowski K, Kudraschow A, Kempf C, Meybohm P. Comparison of open and closed, invasive pressure monitoring Comparison of open and closed, invasive pressure monitoring devices in Patient Blood Management – review of engineering, outcome, patient safety and economic viability. Anästhesiologie & Intensivmedizin. 2018;59:146–153. de.
2. Gleason E, Grossman S, Campbell C. Minimizing diagnostic blood loss in critically ill patients. Am J Crit Care. 1992;1(1):85–90.
3. Mukhopadhyay A, Yip HS, Prabhuswamy D, Chan YH, Phua J, Lim TK, Leong P. The use of a blood conservation device to reduce red blood cell transfusion requirements: A before and after study. Crit Care. 2010;14(1):R7. doi:10.1186/cc8859.
4. Riessen R, Behmenburg M, Blumenstock G, Guenon D, Enkel S, Schäfer R, Haap M. A Simple „Blood-Saving Bundle" Reduces Diagnostic Blood Loss and the Transfusion Rate in Mechanically Ventilated Patients. PLoS One. 2015;10(9):e0138879. doi:10.1371/journal.pone.0138879.
5. Meybohm P, Herrmann E, Steinbicker AU, Wittmann M, Gruenewald M, Fischer D, Baumgarten G, Renner J, van Aken HK, Weber CF, et al. Patient Blood Management is Associated With a Substantial Reduction of Red Blood Cell Utilization and Safe for Patient's Outcome: A Prospective, Multicenter Cohort Study With a Noninferiority Design. Ann Surg. 2016;264(2):203–211. doi:10.1097/SLA.0000000000001747.
6. Crow S, Conrad SA, Chaney-Rowell C, King JW. Microbial contamination of arterial infusions used for hemodynamic monitoring: A randomized trial of contamination with sampling through conventional stopcocks versus a novel closed system. Infect Control Hosp Epidemiol. 1989;10(12):557–561. doi:10.1086/645951.
7. Oto J, Nakataki E, Hata M, Tsunano Y, Okuda N, Imanaka H, Nishimura M. Comparison of bacterial contamination of blood conservation system and stopcock system arterial sampling lines used in critically ill patients. Am J Infect Control. 2012;40(6):530–534. doi:10.1016/j.ajic.2011.08.006.

Blood sampling systems XL

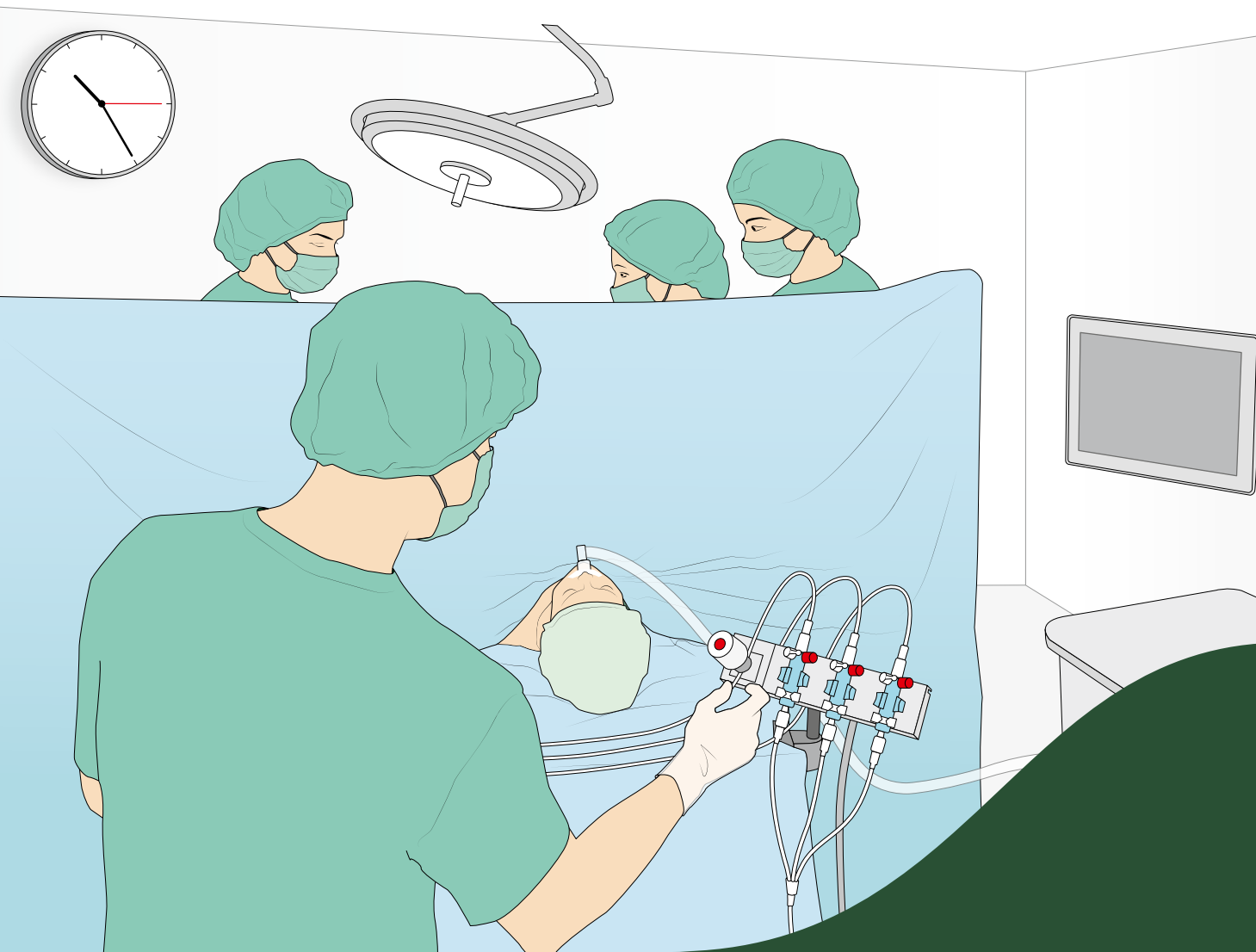
Extra flexibility
CODAN's blood sampling systems XL enable the use of closed blood sampling systems within different departments of clinical facilities without the need for compromises. Due to the fill volume of 6 ml, blood samples can be taken easily and reliably even in clinical applications where a larger volume shift is required.

CODAN's blood sampling systems XL thus guarantee the fundamental benefits of closed sampling systems, on the one hand, and enable remote sampling, on the other.

The decisive combination
Combined with the proven Xtrans® series pressure transducers, the blood sampling systems XL offer outstanding benefits for clinical health institutions where invasive blood pressure monitoring sets are used.

CODAN's pressure monitoring sets with blood sampling systems XL are available in a variety of versions that are user friendly and ready for application:

- Basic and supplementary configurations for single and multiple pressure monitoring
- Configurations based on different patient populations
- Point-of-care, remote or flexi sampling configurations
- green line® with the use of PVC-free components



Reservoir XL – proven expertise in ergonomic design

1. Integrated bacteria filter for protection against the ingress of pathogens
2. Smooth surfaces ensure easy cleaning and ergonomic use
3. Blue piston seal and transparent housing for visual monitoring after sampling
4. Inline design for easy priming and flushing as well as simple drawing of mixing volumes
5. Secure attachment to CODAN contact boards for convenient one-handed operation
6. Minimum contact area between piston seal and flow channel
7. Optimal coordination between piston seal and reservoir housing for easy and safe operation

Can be individually configured

Customised and ready-to-use invasive blood pressure monitoring systems from CODAN are available with different versions of the sampling port. All blood collection systems manufactured by CODAN are equipped with a disinfectable sampling port where blood samples can be taken.

CODAN Worldwide

CODAN is known internationally as a manufacturer and supplier of medical transfer systems. The CODAN Companies have more than 1500 employees around the world.

The name CODAN is synonymous with reliability, quality and precision based on the know-how and experience gained from more than 60 years of research and development. Company-owned production facilities and sales companies around the world are a guarantee for efficient production, a tight-knit sales network and a first-class service for customers in the healthcare sector.

CODAN Product range

- Infusion sets
- Transfusion sets
- Extension sets & Manifold connectors
- Infusion & Transfusion accessories
- Infusion filters & Filter systems
- Neonatology & Paediatrics products
- Withdrawal, Preparation & Administration systems
- CODAN CYTO®
- Chemoprotect® products
- Urology & Gynaecology products
- Single use syringes
- Invasive Blood Pressure Monitoring
- Infusion Technology Solutions
- Volumetric & Syringe pumps
- Software
- CODAN COMPONENTS

CODAN Companies

CODAN Medizinische Geräte GmbH · Deutschland
CODAN pvb Critical Care GmbH · Deutschland
CODAN pvb Medical GmbH · Deutschland
CODAN 11, S.A. · Portugal
CODAN US Corporation · USA
CODAN Inc. · USA
CODAN NORGE AS · Norge
CODAN TRIPLUS AB · Sverige
CODAN Limited · United Kingdom
CODAN FRANCE Sarl · France
CODAN Medical AG · Schweiz
CODAN ARGUS AG · Schweiz
arcomed AG · Schweiz
CODAN BV · Nederland
CODAN s.r.l. · Italia
CODAN Medical GmbH · Österreich
CODAN Medical ApS · Danmark
CODAN DEHA ApS · Danmark
CODAN MEDITECH s.r.o. · Česká republika
arcomed Pty Ltd · Australia
arcomed Ltd · New Zealand

Compliance of the established quality management systems with the provisions of EN ISO 13485, the Council Directive 93/42/EEC and/or Regulation (EU) 2017/745 has been certified by the relevant, competent notified bodies:

TÜV SÜD Product Service GmbH
CODAN Medizinische Geräte GmbH
23738 Lensahn, Germany

CODAN pvb Critical Care GmbH
85661 Forstinning, Germany

CODAN US Corporation
Santa Ana, CA 92704, USA

CODAN ARGUS AG
6340 Baar, Switzerland

arcomed AG
8302 Kloten, Switzerland

Presafe Denmark A/S
CODAN Medical ApS
4970 Rødby, Denmark

94.3264.05 / 2026-05

CODAN

Manufacturer
CODAN pvb Critical Care GmbH
Römerstraße 18
D-85661 Forstinning
Tel.: +49 (0) 81 21 · 98 02 0
codan@codanpvbcc.de
www.codancompanies.com

The decisive connection