# CODAN AeroGuard®

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Additional safety for invasive blood pressure monitoring







# CODAN AeroGuard®

### Blood pressure monitoring sets from CODAN pvb Critical Care

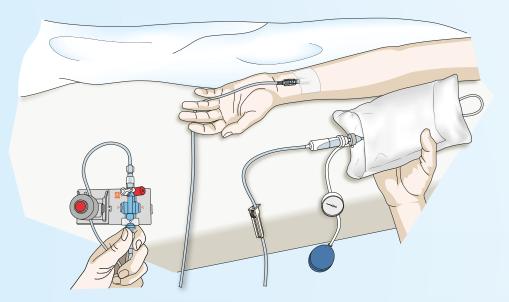
For many years now, the invasive blood pressure monitoring sets from CODAN pvb Critical Care have been used in intensive care and anaesthesia to display and register blood pressure continuously and also to enable arterial blood samples to be taken for laboratory medicine. Invasive blood pressure monitoring is performed on far in excess of 50 % of all patients in

intensive care in hospitals and has always been a precise and reliable method for continuously monitoring the cardiovascular system<sup>1,2</sup>. The name CODAN pvb Critical Care not only stands for the maintenance of this gold standard, but also for the consistent optimisation of invasive blood pressure monitoring sets in terms of transfer quality, flexibility and patient safety.

### Patient transport

Even during intra-hospital patient transportation, invasive blood pressure monitoring helps medical staff to assess the patient's cardiovascular system. The major challenge faced by medical staff when transporting a patient lies in reliably and continuously maintaining all monitoring and treatment measures for the entire duration of transportation<sup>3</sup>. Consequently, the transportation of intensive care patients who require neurological, respiratory and haemodynamic monitoring is particularly critical and presents a great potential risk, especially in turbulent situations<sup>3</sup>. If a

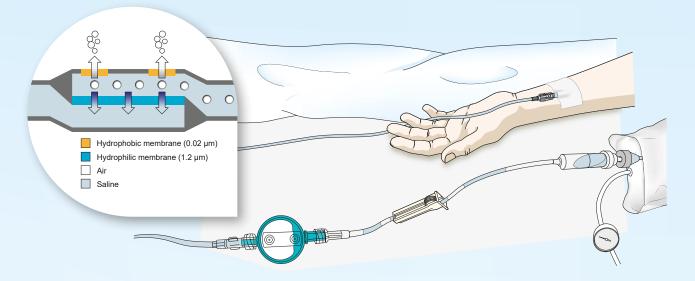
blood pressure monitoring set is stored incorrectly and the roller and sliding clamps of the filling system are not closed, air can, for example, enter the blood pressure monitoring set via the connected saline bag or drip chamber<sup>4</sup>. Air pockets which are guided into a patient's vascular system can cause air embolisms which, in turn, can have catastrophic consequences for the patient<sup>4,5</sup>. Even just the most minimal amounts of air in the arterial system can not only lead to extremely serious complications, but also major costs for the clinical facility6.



#### Sources

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### AeroGuard<sup>®</sup> – Providing that extra bit of safety



In order to prevent air from entering into the patient's vascular system at all costs, the safety component AeroGuard<sup>®</sup> was specially developed for invasive blood pressure monitoring. This filter system is integrated into the classic filling system of the blood pressure monitoring set from CODAN pvb Critical Care and essentially comprises two chambers and filter membranes each. Due to its hydrophilic features, the 1.2 µm membrane located between the chambers retains all air pockets that would pass through the blood pressure measuring set from the direction of the saline bag.

This air is then separated off out of the system via a hydrophobic 0.02  $\mu$ m membrane. AeroGuard® therefore not only protects against the undesired penetration of larger amounts of air, but also against tiny air bubbles which could enter the hose system whilst the blood pressure monitoring set is being filled. Moreover, thanks to the 1.2  $\mu$ m membrane, particles are also filtered out at the same time. Positioning the AeroGuard® above the pressure transducer decouples the filter system from the blood pressure monitoring and, in this way, ensures that the signal transmission is not negatively influenced by the component.

## The outstanding advantages of AeroGuard®

AeroGuard<sup>®</sup> sets new standards when it comes to patient safety during invasive blood pressure monitoring. The filter system offers:

- Increased patient safety thanks to reliable air separation of the 0.02 µm membrane at ≤ 500 mmHg
- Particle filtration through the 1.2 µm membrane
- Full functionality even after having been wetted externally with NaCl solution or disinfectant\*
- · Use of PVC-free materials

Together with the reliable and precise pressure transducers in the Xtrans<sup>®</sup> series and the hygienically closed blood sampling systems from CODAN pvb Critical Care, AeroGuard<sup>®</sup> offers next-level benefits for all healthcare facilities where invasive blood pressure monitoring sets are used.



# 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 lines and manifold connectors
- · Infusion and transfusion accessories
- · Infusion filters and filter systems
- Neonatology/Paediatric products
- · Withdrawal, preparation and administration systems
- CODAN CYTO<sup>®</sup>
- Chemoprotect<sup>®</sup> products
- · Single use syringes
- Invasive blood pressure monitoring systems
- Infusion pumps
- Other CODAN Products

Compliance of the established quality management systems with the provisions of EN ISO 13485 and the Council Directive 93/42/EEC 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

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The decisive connection