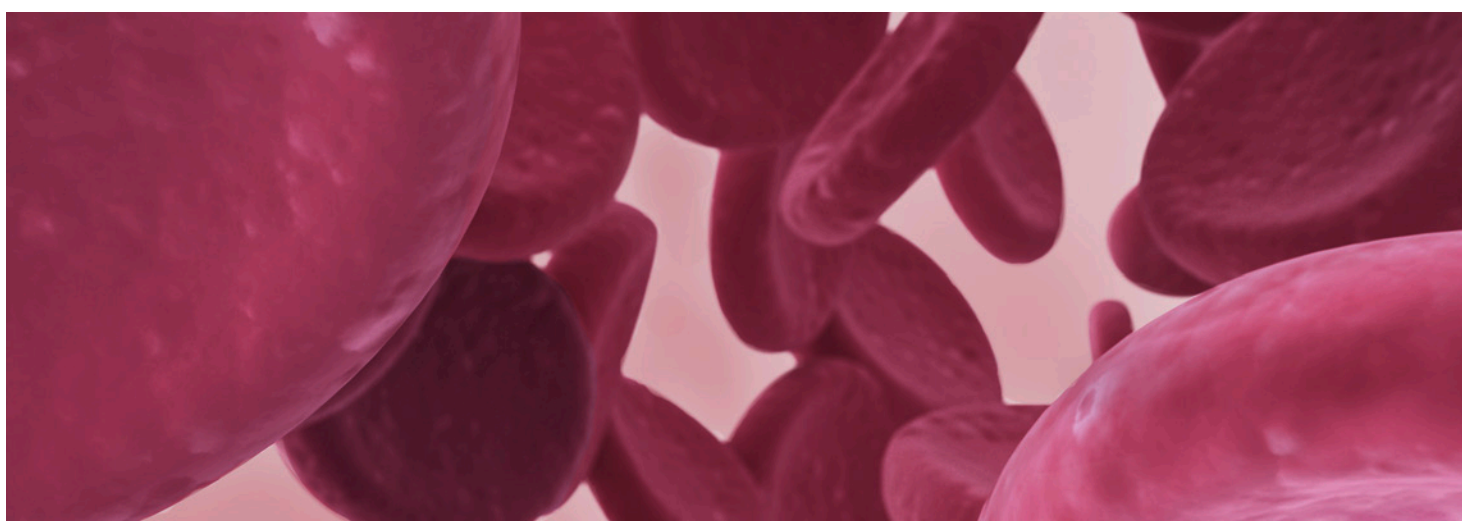
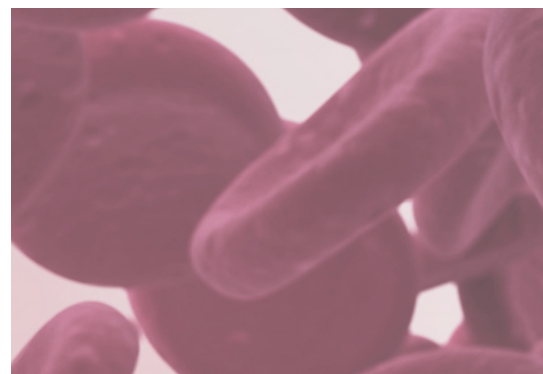


# CODAN Blood management



Responsible handling of  
a valuable resource



# CODAN Blood management

## Transfusion set Drip SWAN®

As blood is a valuable resource, transfusion therapy should always be handled with great care and consideration.

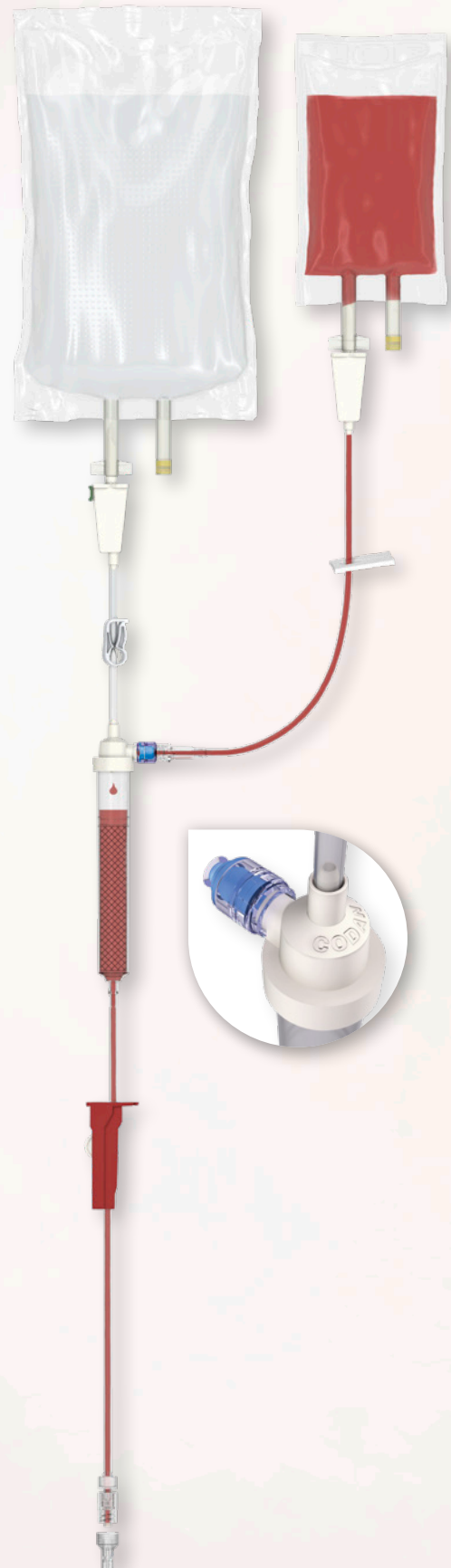
When using standard transfusion systems, either a certain amount of blood stays unused in the tubing to be thrown away, or complicated rinsing steps must be taken. Administration of this valuable product in a closed system with the CODAN Drip SWAN® (**SW**abable **A**dapter **N**eedle-free) products is quick, safe and easily done, ensuring proper blood management.

A Koppelsystem which is already connected to the blood bag, can be directly added to the Drip SWAN® set. For proper use of the 200 µm transfusion filter with a surface area of 23.5 cm<sup>2</sup>, it is necessary to fully wet the filter with saline solution (NaCl 0.9 %) before giving the blood. This assures trouble-free administration in a closed system. Rinsing the whole set afterwards ensures complete administration of the blood, and, if needed, it is also possible to give more blood transfusions with one set by changing to a new Koppel-system. So the transfusion set Drip SWAN® is yet another CODAN product which helps to increase safety both for patients and for medical personnel, and to minimise risks to the greatest possible extent.

Clear benefits for hospital, medical personnel and patients are the following:

- Safety for medical personnel and patients
- Complete administration without any loss of blood
- Needle-free injection via the SWAN-LOCK® is always possible
- Reduced risk of contamination
- Less manipulation of catheters and other intravenous accesses
- Decreased consumption of transfusion sets
- Reduction of disposal costs

**Drip SWAN® products are suitable for application with flexible blood bags and compatible for use under pressure and gravity conditions.**



## Transfusion sets B93/B88



The non-vented blood transfusion sets B93 and B88 were developed especially for use with flexible blood bags. The special bag-type design of the spike enables easy penetration of bag ports and offers a safe connection between blood bag and transfusion set. The flexible, transparent and non-reflecting material of the drip chamber enables easy priming and control of drip rate, so that the handling of smaller or bigger amounts of blood is safe and easy.

The integrated 200 µm blood filter with 11.5 cm<sup>2</sup> surface area in all B93 versions or 23.5 cm<sup>2</sup> surface area in all B88 versions offers effective filtration of potential fibrin strands and clots.

**All blood transfusion sets manufactured by CODAN comply with the physical, biological and chemical requirements of EN ISO 1135 part 4 - Transfusion sets for single use, gravity feed or EN ISO 1135 part 5 - Transfusion sets for single use with pressure infusion apparatus.**

## Transfusion sets Y-I88

The blood transfusion sets Y-I88 are characterised by multiple spikes at one end and the large inline drip chamber equipped with a 200 µm blood filter with 23.5 cm<sup>2</sup> surface area. This enables consecutive administration of blood, blood components and saline solution.

The multiple spike feature enables the medical personnel to set up more than one transfusion in an easy and time-saving way. Preparation prior to administration can be effected with one set instead of several sets. This handling of transfusion reduces user preparation time, costs for the clinic and waste.

**All CODAN blood transfusion sets are equipped with a FlowStop protection cap on the Male Luer-Lock adapter. A hydrophobic filter integrated into the FlowStop protection cap that remains on the Male Luer-Lock adapter during priming allows air to pass, but as soon as solution reaches the filter, the flow stops automatically. This very efficient product prevents leakages and reduces the risk of contamination.**



# Neonatology/Paediatrics

Reliable and accurate products are essential when caring for neonates and paediatric patients. In addition to the ready-to-use administration sets CODAN offers, there are also various products for safe and easy blood transfusion available.

## Combined blood filter sets

These sets are complex systems with a number of important components. The drip chamber B93 with the special bag-type spike includes an integrated 200 µm blood filter with an effective surface area of 11.5 cm<sup>2</sup>. All blood filter sets have transparent, flexible PVC tubing with plasticiser TOTM in the system.

Thanks to the needle-free Y<sup>SWAN</sup>, it is possible to connect a Male Luer-Lock syringe for removal of blood from the blood bag and giving the required blood via syringe pump to the patient.

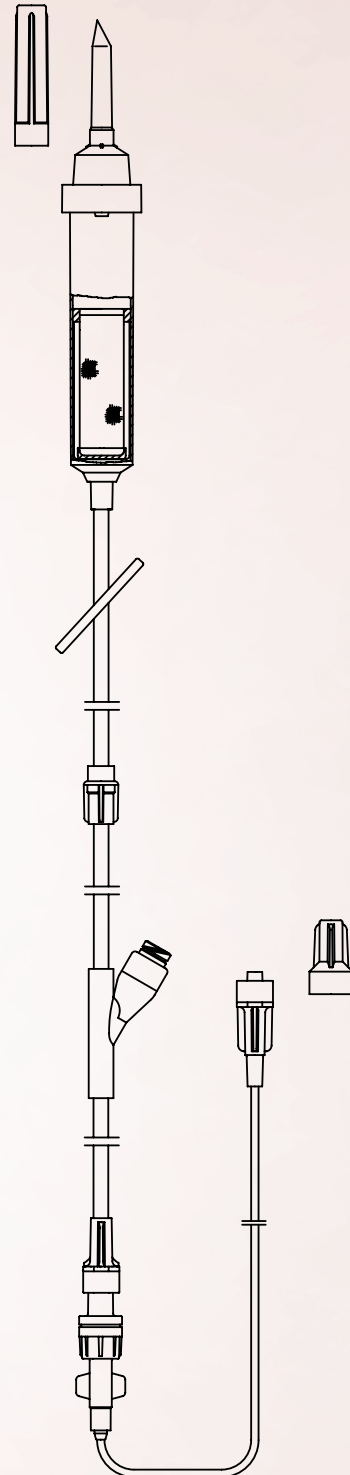
This procedure can be repeated - the accepted good hygiene measures and working practices should be followed at all times.

A pressure activated anti-siphon valve in the system prevents any backflow as well as accidental free flow of blood. The Male Luer-Lock adapter at the end of the extension line ensures a safe connection to the intravenous access of the patient.

**CODAN Neonatology/Paediatrics sets for blood transfusion can be configured in different and customised ways.**

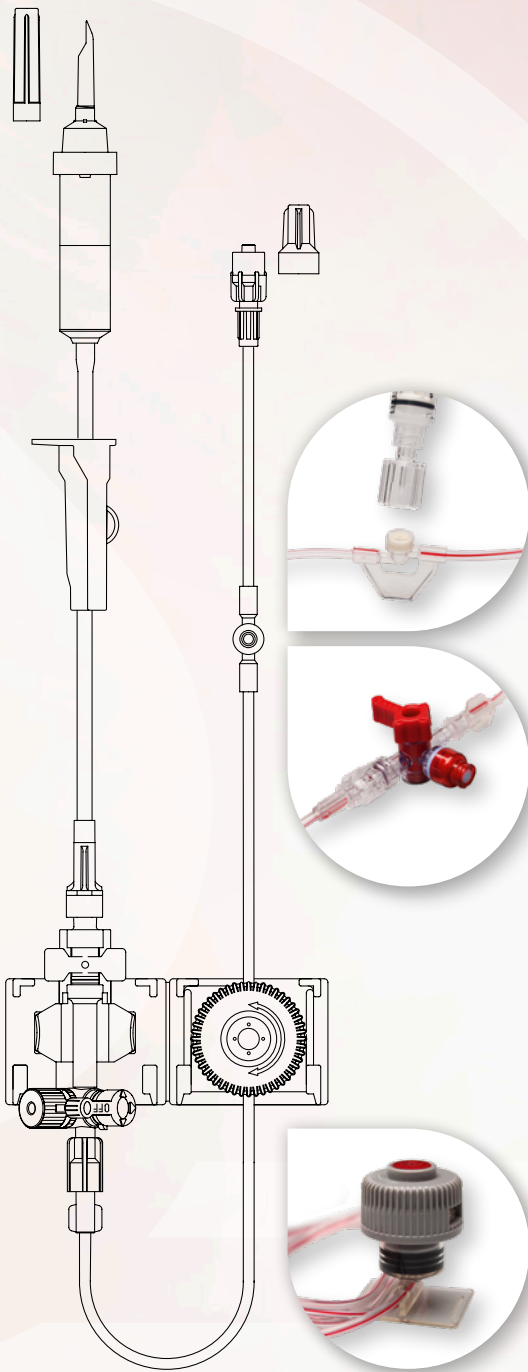
## Blood filter set

TAKE SET<sup>SWAN</sup> B93 - the product consists of the transfusion drip chamber B93 with a 200 µm blood filter, the effective filter area amounting to 11.5 cm<sup>2</sup>, as well as a SWAN-LOCK<sup>®</sup> for filtration and withdrawal of small amounts of blood or blood components. The drip chamber is connected to a blood bag. It is only used as a filter chamber and can be filled completely. The entire filling volume is approximately 13 ml.





# Closed arterial blood sampling system



CODAN closed blood sampling systems were specifically developed for blood sampling during invasive blood pressure monitoring and are mainly used in the field of intensive care and anaesthesia.

To support the responsible handling of blood, a valuable resource, the CODAN closed blood sampling systems make a significant contribution to keep the loss of patients' blood to a minimum.

The core of the closed blood sampling system is the CODAN reservoir with its given filling volume. It ensures that no diluted blood has to be thrown away before taking blood samples for analysis.

The bacterial filter under the red cap on the upper part of the reservoir safely prevents a possible penetration of bacteria and subsequent contamination. Even after repeated operation of the reservoir, the entire inner cylinder remains sterile.

By turning the operating knob, the filling volume is shifted distally or proximally. The CODAN reservoir is unique in its function, ensures optimal handling and provides maximum safety for patient and medical personnel.

Clear benefits for hospital, medical personnel and patients are the following:

- Simple and user-friendly design combined with maximum safety
- Closed and safe blood sampling system to guard against the risk of infection
- User is protected from contact with patients' blood
- Needle-free blood sampling systems provide excellent protection from needle stick injuries
- No unnecessary loss of patients' blood
- Reduction of waste

**Customised and ready-to-use CODAN invasive blood pressure monitoring systems are available with different variants of sampling ports.**

**All CODAN blood sampling systems are equipped with a disinfectable sampling port where undiluted blood samples can be taken hygienically.**

# 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 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 · California · USA  
CODAN Inc. · California · USA  
CODAN NORGE AS · Norge  
CODAN TRIPLUS AB · Sverige  
CODAN Limited · Great Britain  
CODAN FRANCE Sarl · France  
CODAN Medical AG · Schweiz  
CODAN ARGUS 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

### 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®
- Chemoprotect® 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

### Presafe Denmark A/S

CODAN Medical ApS · 4970 Rødby, Denmark

### Manufacturer

CODAN Medizinische Geräte GmbH  
Stig Husted-Andersen Straße 11 · 23738 Lensahn, Germany  
Tel. +49 (0) 43 63 · 51 11 · Fax +49 (0) 43 63 · 51 12 14  
codan@codan.de · www.codancompanies.com



**The decisive connection**