

# CARUM

HOSPITAL-GRADE BREASTPUMP  
TO MEET THE HIGHEST DEMANDS



Ardo is  
WHO Code  
compliant



SWISS QUALITY 

 ARDO

# CARUM

BREASTPUMP FOR HOSPITALS AND HIRE

To satisfy the highest demands of mothers and specialists, Ardo developed the Carum hospital pump—it is powerful, reliable, and best equipped to meet the different requirements of mothers of full-term and pre-term babies.



## Unique, individually adjustable stimulation and expression mode

The Carum hospital-grade breast pump has many benefits: it is powerful while also being ideally suited for use in sensitive situations. It is also unbeatable in the double pump sector thanks to its dual-piston technology. Other popular features of the Carum hospital-grade pump are its ability to switch smoothly between the expression and stimulation mode (manually or automatically after 2 min) as well as the large colour display with its intuitive menu control. The closed pump system "Vacuum Seal" technology guarantees maximum safety and hygiene.

- Easy to operate and clean
- Quiet when in use
- Suction strength (vacuum) and frequency (cycle) settings can be adjusted individually and independently from one another, in stimulation mode and expression mode
- "Sensitive Programme" for gentle expressing when nipples are painful and sore
- Gentle transition from stimulation mode to expression mode (2 phase breastpump)
- Timer / stop watch
- Large color display with dimmer function



# CARUM BATTERY

BREASTPUMP FOR HOSPITALS WITH RECHARGEABLE BATTERY

The Carum Battery is functionally identical to the existing high-quality Carum and also offers the same valuable features. A powerful integrated battery provides up to 4 hours of operation without charging. Freelance professionals can help the mother to express efficiently at home (in cases of engorgement, for instance), without the need for a mains connection. The Carum Battery therefore offers maximum power combined with excellent mobility.

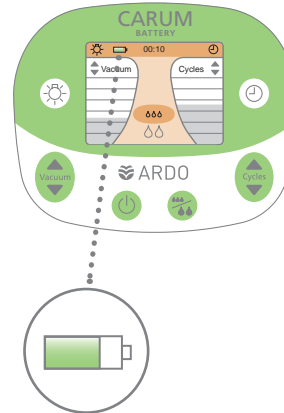
## Highly mobile thanks to rechargeable battery

### Allows location-independent expressing in the neonatal department

- Mothers can express where they can see their premature or sick child. This promotes better milk flow.
- Increased safety: it is not possible to pull out the wrong power cord

### Lightens the workload of professionals

- 4 hours of battery life without recharging (12 x 20 min.)
- The status of the integrated battery is shown on the screen
- The battery charging time is only 2 hours
- Looking for a power socket becomes unnecessary, e.g. in the patient's room at night



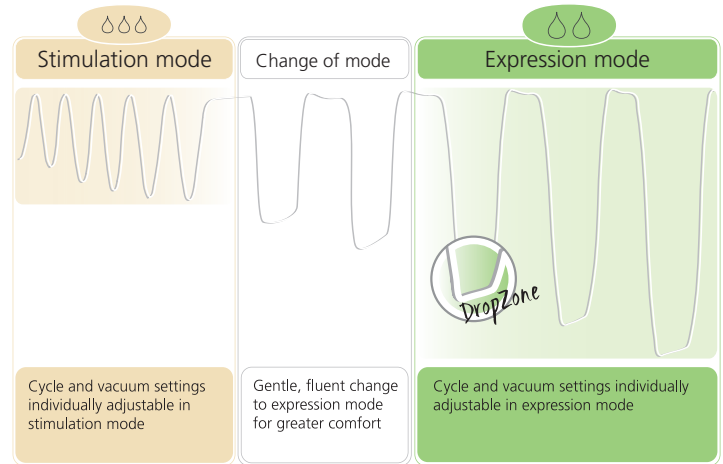
Stable and easy to maneuver mobile stand as option for Carum and Carum Battery

## Individual Phases

Ardo breastpumps can be adapted to the mother's personal needs at any time. The vacuum intensity and cycle settings can be individually adjusted.

### For mothers who want to decide for themselves

Mothers prefer being able to adjust the number of cycles and vacuum intensity themselves to suit their individual needs. Carum is the first breastpump to allow the cycle and vacuum intensity settings to be controlled independently from one another in both stimulation and expression mode.



In the **"DropZone"** a stable vacuum is maintained at the set level. This encourages the continuous and unimpeded flow of breast milk. Particularly with a low cycle, the **"DropZone"** helps with efficient expressing because the milk has more time to flow.

## "Sensitive Programme" for sore nipples

In the "Sensitive Programme" the professional Carum hospital pump operates with a barely detectable vacuum and cycle, thus enabling gentle expressing if nipples are painful and sore. The settings can also be adjusted to the sensitivity of the mother in small steps.

### Sensitive Programme





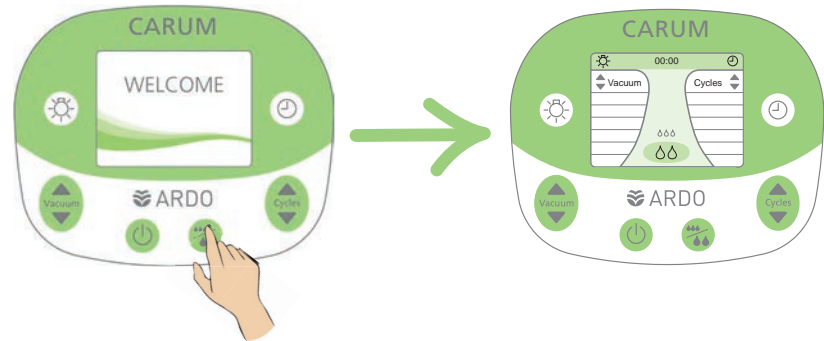
Low and gentle starting cycle and vacuum settings especially for sore and tender nipples

## Gentle expressing with Carum for sore and sensitive nipples

The smooth and gentle expression program is available as standard with every Carum.

To activate the "Sensitive Programme":

1. Press the On/Off button 
2. Press the mode button  while the Welcome screen is displayed so that Carum switches to the "Sensitive Programme"



## "Vacuum Seal" technology

The "Vacuum Seal" technology describes the closed pump system with a hygiene barrier built directly inside the breast shell.



High hygiene and safety standards thanks to the closed pump system

The proven "Vacuum Seal" technology serves as a 100 % barrier against bacteria and ensures that no breast milk or impurities can enter the connecting tube or pump. This provides reliable protection against contamination of the breast milk and thus prevents infection. The barrier protection was validated by an independent laboratory.



# TECHNICAL DATA

## CARUM AND CARUM BATTERY

	Stimulation mode	Expression mode	"Sensitive Programme"
Vacuum (intensity of suction)	30–150 mbar Start level 60 mbar	30–330 mbar Start level 30 mbar higher than in stimulation mode	Start level 30 mbar
Cycles (frequency of suction)	72–120 per minute Start level 90 per minute	30–60 per minute Start level 45 per minute	Start level 30 per minute

	Carum	Carum Battery
Contents	Breastpump, power cord, protective carry case	Breastpump with battery, power cord, protective carry case
Battery	–	Built-in (lithium)
Measurements of pump (LxBxH)	302 x 240 x 180 mm	302 x 240 x 180 mm
Weight	3 kg	3.7 kg
Power cord	Length 3 m	Length 3 m
Power supply voltage / frequency	100–230 VAC / 50–60 HZ	100–230 VAC / 50–60 HZ
Guarantee	3 years	3 years

### Compliance / norms

- ISO 13485: 2003
- CE (MDD 93/42/EEC)
- EMC tested  
(EN 60601-1-2)
- Ardo is WHO code  
compliant



# CLINICARE PUMPSET

STERILE DISPOSABLE OR 24-H PUMPSET

## Ardo Pumpsets

Hospitals large and small have one thing in common: they value the extensive range of Pumpsets offered by Ardo in line with constantly changing needs.

Designed especially for use in hospitals

The high-quality Pumpset solutions offer maximum safety and can be easily combined with different milk containers for extra flexibility: alongside glass bottles, you can also choose from BPA-free plastic bottles such as disposable bottles (50 ml, 80 ml, 120 ml and 250 ml) or reusable bottles (150 ml). The practical Easy Freeze breast milk bags complete the range.



Disposable or 24-h use

- Disposable or 24-h use (8 x per day)
- In individual sterile packaging
- The only disposable pump system with a hygiene barrier integrated in the breast shell
- Excellent standard of hygiene and safety
- Easy to use



Vacuum Seal

Not made with BPA





The Clinicare Pumpset is suitable for the effective and gentle expression of breast milk. It can be used for single as well as double pumping. The Clinicare Pumpset was specially developed for the Carum breastpump.

### **Time-saving**

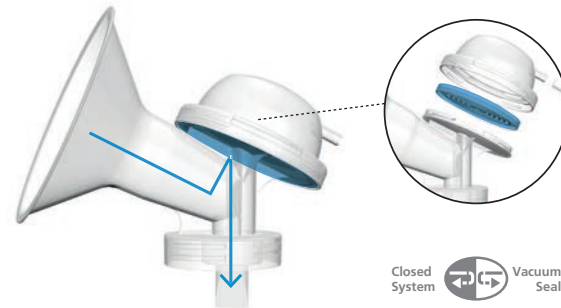
The Clinicare Pumpset, which has very few parts, features quick assembly and ease of use. The use of the Clinicare Pumpset can be easily explained, saving healthcare staff valuable time.

### **Convenient**

The sterile Clinicare Pumpset can be used immediately, that is, without cleaning prior to initial use. In addition, mothers can clean their personal pumpset themselves after repeated use. Your time and effort as healthcare staff are thus greatly reduced.

### **Excellent standard of hygiene and safety**

The Clinicare Pumpset is packaged sterile, easy to clean, and designed for use by only one mother.



In addition, the Clinicare Pumpset works with a closed pump system, based on the proven "Vacuum Seal" technology by Ardo. The hygiene barrier installed in the breast shell protects the breast milk as well as the breastpump from contamination and cross-contamination. The Clinicare Pumpset offers an excellent standard of hygiene and safety in your hospital.

# ONE MUM PUMPSET 72 H

STERILE PUMPSET FOR HOSPITALS

A mother in hospital will receive her own sterile One Mum Pumpset 72 h, which she can use, without further sterilization, for up to 72 hours. During this time she can herself take care of cleaning and storing the Pumpset (e.g. using the writable Accessory Bag).



## Reduce cost and save time – 72 hours of use without sterilizing

Specifically developed for the use described above, the One Mum pumpset 72 h has undergone an extensive validation procedure. The certified test procedures were conducted under controlled conditions, using the relevant reference pathogenic microorganisms\* and human breast milk, in order to simulate "worst case" scenarios.

Results of the microbiological tests: All pathogens used in the contamination trials could be successfully removed by washing and rinsing.

\*Pathogenic microorganisms used (bacteria and fungi):

- Staphylococcus aureus
- Enterococcus faecalis
- Escherichia coli
- Pseudomonas aeruginosa
- Candida albicans
- Aspergillus niger

- Sterile – can be used for 72 hours without sterilizing (proven cleaning procedure)
- For longer and more cost-effective use
- Environmentally friendly reusable solution
- Individually adaptable, five different sizes of sterile breast shells available
- Accessory bag: washable and writable storage bag for two Pumpsets
- With a hygiene barrier: 100 % barrier against contamination thanks to the "Vacuum Seal" technology

## Models and Accessories of the One Mum Pumpsets 72 H

All Ardo One Mum Pumpsets 72 h are available sterile in all sizes. Enormous cost and time savings are achievable when the pumpset is compared with conventional reusable systems which must be sterilized before use.

All sizes are available sterile

- Breast shell insert 72 h\*      Ø 22 mm
- One Mum Pumpset 72 h      Ø 26 mm
- Breast shell insert 72 h\*      Ø 28 mm
- One Mum Pumpset 72 h      Ø 31 mm
- One Mum Pumpset 72 h      Ø 36 mm
- Accessory Bag (non-sterile)  
to store One Mum Pumpset 72 h

\*Breast shell insert can be used combined with the next largest breast shell

## CLINIC PUMPSET

PUMPSET FOR HOSPITALS



Reusable

- Can be sterilized
- Includes 26 mm breast shell
- Other breast shell sizes available
- Ideal for breastpump hire
- With a hygiene barrier: 100 % barrier against contamination thanks to the "Vacuum Seal" technology

# ARDO PUMPSETS

FOR EVERY NEED



		Clinicare Pumpset	One Mum Pumpset 72 h	Clinic Pumpset
Degree of sterility	Sterile	✓	✓	
	Non-sterile			✓
Use	1x	✓		
	≤ 24 h	✓		
	≤ 72 h		✓	
	> 72 h			✓
Number of users		one mother	one mother	several mothers
Bottle				✓
Sizes	Ø in mm	22   26   31	22*   26   28*   31   36	22*   26   28*   31   36

\*Breast shell insert can be used combined with the next largest breast shell

# CLINISTORE

DISPOSABLE MILK BOTTLES FOR HOSPITALS

The Ardo Clinistore bottles were developed especially for hospitals. The disposable bottles can safely collect and store up to 250 ml of breast milk.



## Clinistore meets the highest hospital hygiene standards

The Clinistore bottles are available sterile or ready-to-use\*, can be used without processing, and are suitable for expressing and freezing breast milk.

All bottles have a graduated scale with 1 ml units, making it easy to read off the exact quantity of milk. The graduations on the 50 ml colostrum bottle start at just 1 ml. This bottle also has a rounded base so that even the smallest quantity of milk is visible and can be more easily removed.

- Versions available:
  - Sterile, individually packaged
  - Ready-to-use, bulk packaged
- Express-Store-Feed
- Disposable
- Compatible with all Ardo pumpsets
- Four sizes: 50 ml, 80 ml, 120 ml, 250 ml
- Standardized bottle neck
- Graduated scale with 1 ml units
- Scale of the 50 ml colostrum bottle starts with 1 ml

\*Ready-to-Use: The high temperatures used in the production process mean that the disposable bottles have a high level of cleanliness. This means that the mother can express the precious breast milk directly into the new Clinistore disposable bottles, store the milk in the bottles and also feed their babies from the bottles.

## Bottles and Containers

### CLINISTORE

DISPOSABLE MILK BOTTLE, STERILE AND READY-TO-USE

- Sterile, individually packaged or ready-to-use, bulk packaged
- Express-Store-Feed
- Not made with BPA
- 4 sizes: 50 ml, 80 ml, 120 ml, 250 ml



### COLOSTRUM BOTTLE

DISPOSABLE MILK BOTTLE, STERILE AND READY-TO-USE

- Sterile, individually packaged or ready-to-use, bulk packaged
- Express-Store-Feed
- Not made with BPA
- Rounded base for better removal of the milk
- 50 ml with 1 ml graduations



### GLASS BOTTLE

HOSPITAL GLASS BOTTLE

- Can be sterilized
- Includes lid
- 130 ml with graduated scale of 10 ml



### MILK BOTTLE

BOTTLE FOR BREAST MILK

- Reusable
- Not made with BPA
- Lid with removable lid insert
- 150 ml with graduated scale of 10 ml



### EASY CUP

FEEDING CUP

- Can be sterilized
- Feeding without nipple confusion
- Cup without spout reduces risk of aspiration
- Not made with BPA
- 50 ml with graduated scale of 5 ml



### EASY FREEZE

BREAST MILK STORAGE BAG

- Freezing of breast milk
- Express milk straight into the protective bag
- Unique feature: integrated heat indicator
- The filled bag will stand on its own
- Double coating protects milk against unwanted odours



## Practical accessories

### OPTIFLOW

ACTIVE MASSAGE INSERT

- Active massage effect
- Helps particularly with engorgement around the areola
- The 31 mm breast shell is needed for pumping with the Optiflow.
- Soft, silky-smooth silicone



### EASY FREEZE HOLDER

BOTTLE HOLDER FOR CARUM

- Alternative to conventional bottle holders
- Suitable for hanging small bottles and Easy Freeze breast milk storage bags
- Easy to clean by wiping with disinfectant



### CONTAINER

TRANSPORT AND STORAGE OF CARUM

- Safe and hygienic
- Easy to clean
- With address field for drop shipment



### MOBILE STAND

FOR CARUM

- Stable and versatile
- Integrated storage for power cord
- Antistatic castors



### ACCESSORY BAG

PUMPSET STORAGE BAG

- Storage bag for two Pumpsets
- Can be labelled with name and date
- Washable at 60 °C
- Integrated suspension loop



### TULIPS

NIPPLE SHIELDS

- For suckling and attachment difficulties
- Ideal for unusual nipple shapes
- For sore and painful nipples
- Optionally available sterile and individually packaged





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