



## TECHNICAL DATA SHEET

# SMARTDISPENSER

### Product description

The SmartDispenser is a combination of pump, balance and control unit. It allows accurate dosage of boar semen extender into each ejaculate in an easy way. The SmartDispenser control unit activates the peristaltic pump until the target weight is reached according to the reading of the balance.

Due to the precise weighing of extender, the SmartDispenser is superior to the use of a peristaltic pump with rotation control, because diverse weaknesses are eliminated:

- No more dosage inaccuracy due to different tubing materials and diameters, different wall thicknesses, restoring forces and ageing of the tubing
- Aspirated air does not influence the system
- Easy calibration on the balance
- Errors caused by different filling levels in the vat can not occur



*SmartDispenser XL*

### Application

Enter the desired extender volume in ml at the keyboard of the control unit of the SmartDispenser. The volume to be poured is shown as a number on a small display. After pressing the start button, a command "Tara" is sent to the connected balance. This ensures that the weight of the vessel or in case of a semen pool, prefilling of the vessel has no influence on the dosed quantity.

The control unit now adjusts the pump to a high rotation speed and pumps the extender into the vessel placed on the balance. The value of the balance is controlled continuously. When the measured quantity reaches the range of the set value, the pump is adjusted to a constantly lower speed until the weight captured by the balance corresponds exactly to the set value.

The SmartDispenser can be connected to laboratory management software like IDEE. In this case, the desired amount of semen extender does not have to be entered at the keyboard, but is sent directly from the software to the SmartDispenser and is displayed on the control unit. The user just has to start the filling procedure by confirming the displayed volume to be poured by pressing a button.

In case semen pools are produced, subsequent filling processes can be started several times, either by manually entering extender values or with data sent from the management software for each individual ejaculate of a semen pool.



## Properties

- Electronic control unit and balance, interfaced with a pump; the constant feed back between pump and control unit guarantees a measuring precision of  $\pm 5$  g
- Can be combined with a heated extender tank
- The SmartDispenser packages can be combined with the IDEE system
- Very modest space requirements
- Highest level of security and precision for the process of semen dilution
- Splash reduction for less spillage of semen during dilution

The SmartDispenser packages include a stand, tubing/sinker, control unit, scale and a pump

### SmartDispenser XL

- Scale up to 24 kg with a resolution of  $\pm 2$  g
- Pump: up to 13 litres per minute

### SmartDispenser L

- Scale up to 12 kg with a resolution of  $\pm 1$  g
- Pump: up to 5 litres per minute

## Order information

**SmartDispenser XL** [REF.: 13200/0601](#)

**SmartDispenser L** [REF.: 13200/0602](#)

## Accessories

**Silicone tubing** for SmartDispenser XL [REF.: 13200/6010](#)

**Silicone tubing** for SmartDispenser L [REF.: 13200/0011](#)

**Sinker**, stainless steel [REF.: 5013200/0012](#)

**Semen mixing cylinder**, 3.5 l [REF.: 13203/0001](#)

**Semen mixing cylinder**, 5.4 l [REF.: 13210/0030](#)



SmartDispenser L