

## Sensomatic offers you the following advantages:

### Design:

- Modern appearance with compact free flow sensor design

### Milking technique:

- Indication of milk flow rate and total yield
- Indication of milk conductivity and milk temperature
- Ability to measure a wide range of flow rates, from high yielding cows to sheep and goats
- Unrestricted milk flow due to free flow sensor design means no effect on vacuum stability
- No additional air inlet and/or generation of froth in the milk
- Keyboard with clear keys to operate cluster operation
- Clear and well organised display of attention codes
- Accurate, automatic cluster removal
- Adjustable indication of time before cluster take is performed
- Adjustable time delay between vacuum shut off and removal of cluster
- Clear "Kick off" indication of cluster

### Pulsation:

- Adjustable pulsation speed and ratio
- Automatically or manually activated Stimulation
- Optional milk flow controlled pulsation

### Operation:

- Clearly marked keys for start/stop milking
- Optional remote start switch
- Manual/Automatic cluster removal
- Possibility to operate parlour gates

### Cleaning:

- No additional cleaning water and detergent needed due to free flow sensor design
- Monitoring of cleaning parameters with clear alarms in case of deviations
- Centralised parlour commands to set units in/out of cleaning mode

### Link to Herd Management System

- Transfer of yield and conductivity data to the PC and the Crystal<sup>®</sup> software
- Display in parlour of cow information coming from the Crystal<sup>®</sup> software
- Possibility to use parlour codes for animals needing attention
- Operate parlour and cow sorting gates from the Sensomatic keyboards
- Link to a wide range of animal ID systems in the parlour

dealer stamp



Golden Hoof award  
Brussels

# SENSOMATIC

## The Monitoring eye of your milking machine

### Answers your questions on milk quality and dairy herd management!

Sensomatic is a new generation of Milking Assistant. The flow cell and information terminal have been developed with the needs of both operator and animal in mind.

It is user and maintenance friendly and can be fitted easily in any milking parlour.

In a sophisticated way, it controls essential milking functions such as pulsation control and cluster take off.

Sensomatic provides valuable information to the milker about milk yield, milk flow rate, milking time and milk temperature. It also measures the electrical conductivity of the milk. All these parameters can be used as effective management tools in monitoring and improving udder health.

Sensomatic's measuring principle copes well with very high yields and flow rates. It also allows for accurate indication of smaller milk yields. This makes the device very well suited to be used for milking small ruminants such as sheep and goats.

Sensomatic monitors the complete process during milking. Deviations from the norm are reported to the operator who can then take action to prevent loss of milk quality.

Linked to a PC with Crystal<sup>®</sup>, Sensomatic presents clear data about milk quality, animal health and fertility. It also then becomes a time saving tool to assist the milker in parlour activities such as operating parlour gates and cow sorting systems.



Willem Alexanderweg 87  
3945 CH Cothen  
The Netherlands

Phone: (31) 343 59 06 00  
Fax : (31) 343 57 85 99  
Email : sales@fusion-electronics.nl



**Sensomatic is user and maintenance friendly and can be fitted easily in any milking parlour. Each stall is equipped with its own FREE FLOW sensor in the long milk tube and has a clear DISPLAY MOUNTED AT OPERATOR HEAD HEIGHT.**

**Free Flow sensor**

The free flow sensor is located in the long milk tube between the cluster and the milk line. It can be fitted in both low line and high line milking systems. Its tube shape and free flow design mean that it does not impede milk flow nor does it affect cleaning capabilities. The sensor is manufactured in one solid piece and does not have any seals, or moving parts. This means that there are no wearing parts.

**Milk yield and milking time**

From the Sensomatic control panel, the dairy farmer can closely monitor the milking process. When used in conjunction with the Crystal® management system, the sensor checks that each animal's yield is in line with expectation. Milk yield and milking time are alternately shown on the display panel and continuously provide the operator with valuable information on the milking process. In addition, the milk flow rate can be indicated either permanently or on request by means of the keyboard (maximum, average or actual).

**Milk conductivity and mastitis control**

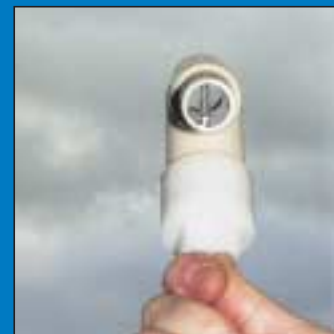
Mastitis is one of the biggest causes of financial loss in dairy farming. Measurement of milk conductivity, provides farmers with an early-warning of infection. Deviations in conductivity are reported immediately and the highest values can always be requested via the display. Linking these measurements to the Crystal® management system provides a powerful tool to assist in the fight against mastitis. This makes it possible to take appropriate corrective action at an earlier stage, thus increasing the chance of a successful cure.

**Cluster removal**

Sensomatic's cluster removal system is a further development of the successful Flowmatic take off system. The cluster removal system provides an indication of time before cluster take off, an adjustable delay between vacuum shut off and cluster removal, cluster kick off detection, and can be used to control a stripping arm.

**Milk-flow controlled pulsation**

Cow-specific milking is more than a buzzword. Every cow is unique. The Sensomatic achieves optimum milking conditions for each animal by tuning the pulsation rate and ratio to the flow rate of the milk. The system selects optimal rates and ratios at each milk letdown. In other words, the sensor is linked to an intelligent pulsation controller, in this way achieving cow individual milking.

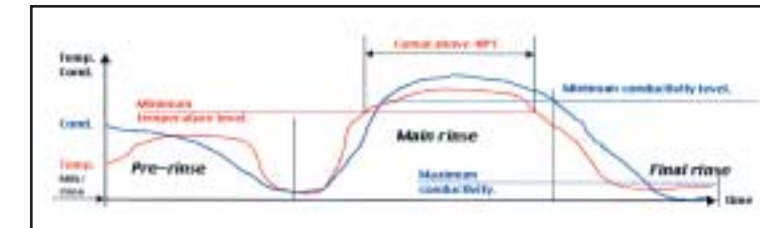


Sensor



**Temperature and quality of the rinse water**

Quality, hygiene and the environment are 'hot' issues in the food industry. Sensomatic's combination of time, flow rate, temperature and conductivity measurement offers direct technical solutions. Each Sensomatic constantly collects valuable data to monitor the milking and cleaning performance of each milking unit and for the whole parlour. Deviations in concentration of cleaning detergents and/or in the temperature of the cleaning solution are reported, as well as the presence of sanitiser residues in the final rinse water.



**Sensomatic linked to Crystal®: Full management system**

If linked to a PC and Crystal®, the Sensomatic becomes an inexhaustible source of information.

The information can be accessed on a daily basis either in the parlour or at the PC. The following information can be entered (E) or viewed (V) on the display unit in the parlour

Master functions:			
<b>Cow identification:</b>		<b>Agenda:</b>	
- cow number	V/E	- days in lactation	V
- manual ID of cow number	E	- lactation number	V
- parlour codes	V/E	- days since last service	V
<b>Milk:</b>		- insemination number	V
- milk yield	V	<b>Feed:</b>	
- expected milk yield	V	- feed allowance	V
- actual milk flow	V	- feed uneaten	V
- milk duration	V	<b>Milking parlour:</b>	
- expected conductivity	V	- parlour codes	V/E
- actual conductivity	V	- message from the parlour	E

**Advantages of Sensomatic linked to Crystal®:**

- Feed optimisation: controlled feeding in the parlour, or in out of parlour feeding stations, to maintain lowest production cost
- Continuous monitoring of production, feed intake and udder health
- Reducing risks, flagging cows recorded by the operator as treated with antibiotics
- Advanced and early detection of illness, increasing the likelihood of successful treatment
- Availability of advanced control functions such as automatic parlour cow traffic and cow separation
- Link to a variety of animal Identification systems, ranging from manual ID to fully Automatic ID, either per stall or at the entry of the parlour.

