



**Baumer**

Passion for Sensors

# CIP – Clean in place sensors

Food safety with maximum overall equipment effectiveness.





## Your benefits at a glance.

### Reduce CIP operation costs

- Efficient resource and material utilization
- Higher productivity

### Food safety

- Precise cleaning process control and process safety with sensors

### Simplify CIP system

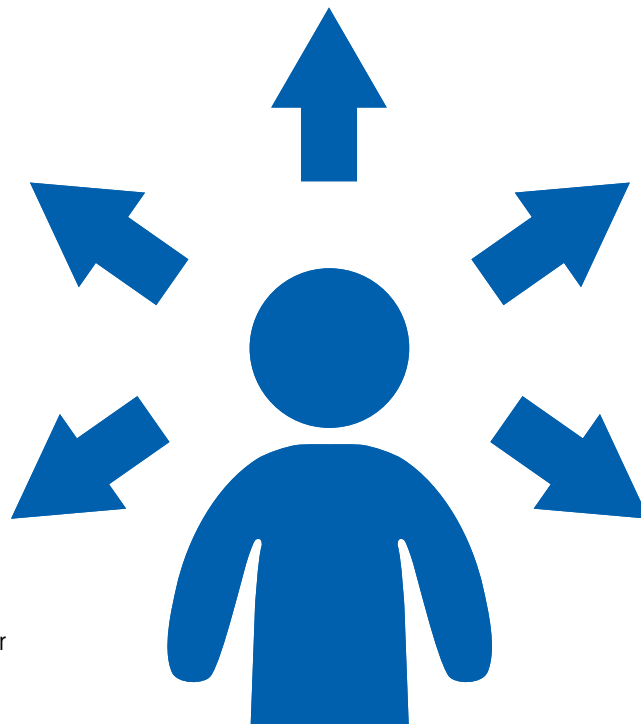
- Easy sensor configuration, ready to fit process adapters and design variants

### Optimize field operations

- Clear and field proven status indication using your individual terminology

### Support from an experienced partner

- Convenient sourcing from a comprehensive portfolio, access to premium sensor technology knowhow



# The perfect solution for your application.

## Concentrate dosing of chemicals



To control concentrate dosing of acid or caustic substances, the conductivity transmitter measures the specified concentration. With precise measurement it ensures food safety and savings of cleaning agent usage. Due to its robust hygienic designed tip, it survives with a long life cycle.

## Cleanliness measurement of rinsing water/ Phase separation of detergents & water (CIP steps)



To avoid chemical contamination of food, the conductivity transmitter precisely measures the residual concentration of chemicals in the rinsing water in order to inform the PLC when the water is absolutely clean to ensure food safety.

To reduce detergent waste the conductivity transmitter measures different media with its fast temperature compensation even during high temperature variance. It sends results to the PLC to set the predefined switching point in order to have a precise phase separation of chemicals and water (CIP steps).

## Tank temperature monitoring



To ensure optimum cleaning effect, the temperature of the detergent inside the tank must be precisely monitored in order to realize a constant quality of cleaning process and food safety in the end.

## Point level detection



Fast and reliable sensor to detect the maximum and minimum tank levels. The level switch can be used in all harsh environments and media. Can be set-up to ignore or detect foam.

## Dry run protection



The level switch protects the pump from running dry during filling and emptying of the tank or pipe. Especially in processes where foam can occur the sensor must decide if the media is just foam or liquid. Conventional sensors have problems detecting these conditions.

## Continuous level measurement



To measure continuous level of liquid in the tank, Baumer offers a variety of sensors for all needs. With hydrostatic technology the PLC will receive constant level information even under extreme temperature conditions up to 200 °C in permanent operation.

# CIP sensor portfolio.

## Conductivity

- Robust one-piece design PEEK sensor element
- High accuracy < 1.0% with fast response time
- Measuring range 500  $\mu$ S ... 1000 mS
- Display with additional concentration value



## Temperature

- Wide range of sensing elements (e. g. front-flush)
- High accuracy < 0.1 °C with fast response time
- Measuring range -50 ... 150 °C
- Optional display with selectable backlight color alarm



## Point level detection

- Self draining, less invasive one-piece sensor tip
- Reliable switching independent of foam and adhesives
- One sensor type for all media
- Bright blue LED status signal



## Continuous level measurement

- High temperature shock resistant
- Excellent temperature compensated accuracy < 0.1%
- Measuring range down to 1 m (0.1 bar)
- Optional display with tank visualization



## Process connections & accessories

- Maintenance free connections without elastomers
- Standard and brand compatible adapters
- Clamp, nut, threaded and welded types
- 3-A designs with leak detection port



All housings in stainless steel with IP 67 or IP 69K.  
Various signaling interfaces selectable (4 ... 20 mA standard).

For more information visit us at [www.baumer.com/CIP/portfolio](http://www.baumer.com/CIP/portfolio)

## Compliance and approvals

Baumer products meet international industrial standards. Where appropriate or selected by options, they are FDA compliant, fulfil the requirements of the respective 3-A Sanitary Standard or comply with EU regulations 1935/2004, 10/2011 and 2023/2006. In addition certain products are EHEDG certified. For hazardous environments you have a choice of ATEX approved products. Please refer to the related data sheets for details.

Overflow protection and leakage monitoring (detection), compliance to Water Resources Act certified by Dibt



# Worldwide presence.



## Africa

Algeria  
Cameroon  
Côte d'Ivoire  
Egypt  
Morocco  
Reunion  
South Africa

## America

Brazil  
Canada  
Colombia  
Mexico  
United States  
Venezuela

## Asia

Bahrain  
China  
India  
Indonesia  
Israel  
Japan  
Kuwait  
Malaysia  
Oman  
Philippines  
Qatar  
Saudi Arabia  
Singapore  
South Korea  
Taiwan  
Thailand  
UAE

## Europe

Austria  
Belgium  
Bulgaria  
Croatia  
Czech Republic  
Denmark  
Finland  
France  
Germany  
Greece  
Hungary  
Italy  
Malta  
Martinique  
Netherlands  
Norway  
Poland  
Portugal  
Romania  
Russia  
Serbia  
Slovakia  
Slovenia  
Spain  
Sweden  
Switzerland  
Turkey  
United Kingdom

## Oceania

Australia  
New Zealand



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