



Process Measurement Solutions for the Food and Beverage Industry



Innovative Technology Since 1921

> VOLUMETRIC FLOW

Electromagnetic Flow Meters

PMO meter approved for use in pasteurization loops per FDA requirements.

Available in sizes from 1/2" to 6" - All stainless steel with tri-clover fittings

Guaranteed hygienic seal - Vacuum-proof liner

Lock out feature stops tampering, external locking device prevents opening

Sanitary process connectors available

Exceeds CIP, AMDERC, FDA and 3-A requirements

Largest magmeter size selection in the industry, 1/10" to 120"

Widest selection of liners and electrode materials available

World's largest producer of magmeters



OPTIFLUX 6300 PMO Meter





BATCH FILLING

Electromagnetic & Coriolis Flow Meters



BATCHFLUX 5500 C Magmeter

Volumetric filling and batching

High stability ceramics measuring tube, extremely stable, long-term

Excellent reliability and accuracy

Optimum sanitary design

Only 2" overall width

Variety of diagnosis functions



OPTIBATCH 4011 C

Compact design with hygienic design of process connections for food, beverage and pharmaceutical applications with welded outer casing

Stainless Steel 316L construction

CIP / SIP to maximum 120°C / 248°F

Mass filling and batching

Integrated electronics



> VA Meters

Variable Area Flow Meters



H250 F M40

All metal instrument specially designed for use in the food and pharmaceutical industries

Accurate measurement of liquids, gases and saturated steam

Available options include HART, Fieldbus, LCD digital display of rate and totalizer, analog, pulse and alarm outputs, switches

CIP and SIP compatible, FDA compliant, Tri-clamp connections, flanges, etc.

Indicator in modular design, optional heating jacket, optional stainless steel housing

Coriolis Meters



Highly precise mass and density measurement - accuracy 0.1%

Multifunctional sensor for direct measurement of density, mass, volume and media temperature

Single, straight measuring pipe, no flow divider - or two parallel tubes, optimised flow divider

OPTIMASS 7400

Entrained Gas/Air Management immune to gas entrainments/ two-phase flows



Easily drained and easy to clean

Low flow velocity, therefore low pressure loss

FDA complaint, 3-A, ASME Bioprocessing certified

Optional heating jacket









Level Meters & Switches



OPTIWAVE 3500

Loop powered FMCW radar, up to 80GHz, TDR technology for contact and non-contact continuous level measurement

Independent of pressure, temperature and density

Unaffected by dust, vapor, foam

CIP / SIP up to 150°C or 300°F Suitable to various tank shapes and sizes

Advanced diagnostics, configuration, visualization and trending software

 $\label{liquids} \mbox{Liquids interface TDR, level switches available for liquids and solids}$

Wide choice of process connections



OPTIWAVE 6500









Conductivity or concentration measurement in CIP circuits

Multi-path total solids sensor for milk fat measurements, filtration/ separator control and solid concentration monitoring

> Waste water version of total solids sensor for early detection of product loss





Compact turbidity sensor for TS measurement in CIP circuits

Digital pH/ORP sensors with built-in transmitter technology for off-line calibration and reduced operating costs



OPTISENS TSS 7000

Chlorine sensors insensitive to bio fouling and de-polarization





OPTISYS IND 8100

Sensors **TEMPERATURE**





Sanitary Sensor Assemblies

Compact Sensors

OPTITEMP TT51



RTDs and thermocouple sensor assemblies

Robust design with sensor backup function reduces the influence of external disturbances

Transmitters featuring easy configuration, installation and maintenance with ConSoft,

One-of-a-kind Smart Sense resistance monitoring detects moisture in the thermowell

Connection heads for a wide variety of requirements, extensive accessories

Hygienic process connections, 3-A approved

Fully welded metallic and ceramic process diaphragms

Superior temperature stability, quick response time

Two-wire 4...20mA

Flush process connections allow for gap-free installation

Universal adaptors for hydrostatic pressure

Extensive diagnostic and parameterization functions on the display and adjustment module or the user-friendly and free DTM



OPTIBAR 2010



OPTIBAR 5060

VORTEX

Energy Management



For steam or gas / compressed air

High measuring accuracy - 1% of measurement value

2-wire device with integrated temperature and/or pressure measurement for true compensated flow

Gross and net heat measurement

Ready to use - plug & play

Maintenance-free sensor design

Fieldbus communication

Pressure and temperature can be called up via HART

Unique valve option for pressure sensor isolation





OPTISWIRL 4200 sandwich

Contact:

KROHNE, Inc. 55 Cherry Hill Drive Beverly, MA 01960 1-800-356-9464

info@krohne.com us.krohne.com

KROHNE, Inc.

4100 N. Sam Houston Pkwy W. Houston, TX 77086 1-281-866-7722

KROHNE, Inc.

300-1100 Burloak Drive Burlington, Ontario L7L 6B2 1-800-356-9464









