

- Paddle Wheel
 - Oval Gear
 - Turbine
- Electromagnetic
 - Vortex
 - Ultrasonic
 - Coriolis
- Thermal Mass And Calorimetric
 - Surface Acoustic Wave (saw)
 - Mechatronic
 - Variable Area (rotameter)
- Positive Displacement (mechanical)
- Displays, Recorders, Controllers And Computation Units For Flow Metering Applications

Flow Measurement

FLOW MEASUREMENT

Flow measurement systems for all liquids, gases and steam. Suitable for industrial process control, consumption and energy management applications.

- Paddle Wheel Flowmeters
- **Oval Gear Flowmeters**
- Turbine Flowmeters
- Electromagnetic Flowmeters
- Vortex Flowmeters
- Ultrasonic Flowmeters
- Coriolis Flowmeters
- Thermal Mass And Calorimetric Flowmeters
- Surface Acoustic Wave (saw) Flowmeters
- Mechatronic Flowmeters
- Variable Area (rotameter) Flowmeters
- Positive Displacement (mechanical) Flowmeters

Displays, Recorders, Controllers And Computation Units For Flow Metering Applications















PADDLE WHEEL FLOWMETERS



- o Ideal for neutral, aggressive and solid-free liquids depending on the version.
- o Nominal diameters up to DN2500.
- o Simpler installation thanks to fitting system.
- o Available as inline or insertion version





OVAL GEAR FLOWMETERS

- o For highly viscous fluids like honey, glue or oil.
- There are versions for low flow rate application
- Electronics available for indication, monitoring, transmitting, On/Off control and batch control
- High accuracy
- Programmable outputs: one or two transistor or relay output(s) and single or dual 4-20 mA current output(s)
- Automatic-calibration: TEACH-IN, simulation of outputs signals provided without the need for real flow
- o Certified Exd hazardous area versions in all sizes.
- o Quadrature pulse output option & bi-directional flow.
- No need for flow conditioning (straight pipe run etc.)



















TURBINE FLOWMETERS

- o Up to DN500
- High accuracy & repeatability
- Low cost of ownership, wide flow range
- Rugged & compact design
- Certified Exd & I.S. hazardous area versions
- Quadrature pulse output option
- Integral or remote pre-amplifiers & flow instruments
- \bullet ±0.15% custody transfer models available











ELECTROMAGNETIC FLOWMETERS

- Insertion Versions
- o Inline Versions
- Versions for water and waste water applications
- Versions for hygienic applications
- o Options for compact or remote electronic transmitter
- $\boldsymbol{o}\$ Versions for low flow, batching, dosing and filling applications















VORTEX FLOWMETERS

- Very suitable for compressed air, gas and steam applications
- Versions for high temperature and steam applications
- o Options for compact or remote electronic
- Versions with integrated temperature and pressure sensors
- Versions with integrated temperature sensor
- o Versions with integrated flow computer
- Versions with integrated ultrasonic flow sensor for technical and mixed gases applications

















ULTRASONIC FLOWMETERS

- o Suitable for a wide variety of liquids and gases
- Inline and clamp-on versions
- Versions with integrated temperature sensor



• Versions for concentration measurement

Versions for low flow measurement

• Versions with integrated vortex flow sensor for technical and mixed gases applications

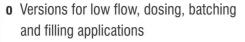






CORIOLIS FLOWMETERS

- Suitable for various liquids and gases.
- Versions for life science applications



Versions for chemical applications

Versions for density and viscosity measurement

• Compact and remote electronic versions

 Burkert Mass Flow Controllers (MFC) and Mass Flow Meters (MFM) for liquids









📺 THERMAL MASS AND CALORIMETRIC FLOWMETERS 🛭

- o Reliable flow measurement in liquid and gases
- Versions for measurement of flow, consumption, pressure and medium temperature
- Versions for wet gas applications
- o Compact and remote electronic versions
- Inline and insertion versions are available
 Analogue pulse RS485 Modbus RTII
- Analogue, pulse, RS485 Modbus RTU, M-bus and relay outputs
- Burkert Mass Flow Controllers (MFC) and Mass Flow Meters (MFM) for gases





SURFACE ACOUSTIC WAVE (SAW) FLOWMETERS

PROCESS

L | M | T E D

...innovative know-how

- o FLOWave SAW flowmeter
- **o** Type 8098
- No obstacles inside the measuring tube, compact, lightweight and low energy consumption
- Conforms to hygienic requirements, CIP/SIP compatible
- o Ideal for liquids with low or no conductivity
- o Digital communication, parameterisation via Communicator, display and Wi-Fi
- o Optional: ATEX certification, II 3G/D





MECHATRONIC FLOWMETERS



- o Integrated temperature measurement
- Integrated with reliable back flow prevention
- o Installation without additional inlet or output pipe lengths
- Red/green color change for process values
- Very short response time







VARIABLE AREA (ROTAMETER) FLOWMETERS

- Suitable for liquids (Clean Water, Fuel & Oil), air and other gases(e.g., nitrogen, hydrogen, oxygen, argon, helium).
- Versions with all-metal design for optimal performance in hazardous area
- o Versions with high resistance to acids and alkalis
- Operating pressure up to 400 bar (5800 psi) for some versions
- Temperature up to 300 °C (572 °F) for some versions
- With many different process connections
- Versions with 4 20 mA electrical output and limit switches
- There are versions suitable for panel mounting and battery assembly
- Assorted needle valves for flow control









POSITIVE DISPLACEMENT (MECHANICAL) FLOWMETERS

AUTOMATED

PROCESS

L | M | T E D

...innovative know-how

- **o** Gas Meters
- o Water Meters







DISPLAYS, RECORDERS, CONTROLLERS AND COMPUTATION UNITS FOR FLOW METERING APPLICATIONS

PROCESS
L | M | T E D
...innovative know-how

- Evaluation units for flow monitoring
- Flow indicators, displays and alarm units
- Data loggers and recorders with flowmeter functions
- Batch, dosing, filling and loading/unloading controllers
- Flow and energy computers
- Multifunction controllers with flowmeter functions
- o Options for panel mounting, field and remote mounting
- Flow consumption monitoring system
- Energy management system



















OUR INDUSTRIAL SOLUTIONS AND SERVICES OFFERING

PROCESS

I M I T E D

...innovative know-how

- Liquid/gas storage/buffer tank level measurement and control
- 2. Liquid/solid dosing/filling/batching systems
- 3. Utility liquid/gas metering and inventory systems
- 4. Fluid loading and unloading systems
- 5. Industrial safety systems
- 6. Energy monitoring and management systems
- 7. Condition monitoring and control systems

- 8. Instrument maintenance and calibration services
- 9. Process plants/machines instrumentation and control
- 10. Compressed air quality solution according to ISO8573
- 11. Compressed air/gas leak detection and control
- 12. Control valves system design, assembly and services
- 13. Industrial wireless and IoT systems
- 14. Motors, pumps and fans monitoring and controls
- Electrical panel building components, accessories and services

INDUSTRY

- Food and Beverage
- Pharmaceuticals
- Cement and Chemicals

- Plastics, Printing and Packaging
- Marine, Oil & Gas
- Power and Energy



Third Floor, 30 Abeokuta Expressway, Near Cement Bus Stop, Dopemu, Lagos

Telephone No: +234 01 3424691 Mobile line: +234 0 8055103288

Email: sales@automated-process.com www.automated-process.com



