

# **RTD Probes & Temperature Transmitter**

## Specification: RTD Probes

- ❖ Pt100/ Pt1000 ❖ Dia: 6 mm
- Process Connection : Triclover & Thread
- Length: up to 100 mm. (Other on Request)
- Weather proof Aluminium Dia. Head IP 65

#### **Temperature Transmitter (Make: Pixsys)**

- Programming: Wireless with Mobile Application
- Input : RTD (PT100/PT1000)
- Output: 4...20mA Loop Powered
- Power supply : operating range 6-32 Vdc
- Connection : Screw pins \* Fixing: On DIN Clip/ B head 3600 points data logger
- **Application:** Hygienic Process/ Utility Process



# **Infrared Temperature Sensor (Pyrometer)**

## Model: PyroCouple (Make: Calex) Specification:

# Choice of temperature ranges from -20°C to 500°C

- Durable, robust stainless steel 316 housing
- Output: 4-20 mA, Type K or J thermocouple, or 0-50 mV
- Fast response with high stability Sealed to IP65

# Application:

- To Measure Chocolate Temperature before the Mould
- To Measure the Temperature of Toffee Webs as they Leave Cooling Drums
- Measure the Temperature of Roaster System

# **Hygienic Pressure Transmitter**

# Model: TFP310 (Make: Trumen) Specification:

- Piezoresistive pressure sensor design
- Measuring ranges: -1 bar to 40 bar
- Output: 4...20mA, 0...10V, 0...5V and others
- Accuracy: ±0.25%FSO or ± 0.5%FSO
- Calibrated and temperature compensated
- Flush diaphragm construction
- Variety of pressure & electrical connections
- Operating temperature range: -20 to 200 °C

**Application:** For Hygienic Process

# **Pressure Transmitter & Digital Pressure Switch**

# Specification:

- Measuring ranges from 100mbar to 600bar
- Absolute, gauge and sealed gauge
- Accuracy: ±0.25%FSO or ± 0.5%FSO
- Calibrated and temperature compensated
- Stainless steel construction
- Piezoresistive pressure sensor design
- Variety of pressure & electrical connections
- Output 4...20mA, 0...10V, 0...5V and others

# Application:

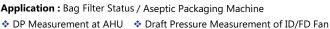
- Process Control Systems/ Utility
- Refrigeration and HVAC Controls Pumps and Compressors

## **Digital Differential Pressure Transmitter**

#### Model: 985M (Make: Beck GmbH)

# Specification:

- Range: 0 ... 250 mmWC / 0 ... 500 mmWC (other on request)
- Supply voltage: 18 ... 30 VAC / VDC
- ❖ Output: 4 ... 20 mA or 0 ... 10 V, 3 wire
- With switching output
- Linearity: ≤ ±0.5% FS, min. ±1 Pa
- ❖ Working temperature : -20 ... 70°C
- Protection class: IP65
- Display : Optional
- Process connection P1 and P2: Stainless steel -Hose pipe connection with 4 / 6 mm outer diameter



# Adjustable/ Gas / Vacuum Pressure Switch

#### Model: 901P (Make: Beck GmbH)

#### Specification:

- Pressure Range: -700 mbar to 12 bar
- Max. operating pressure: 0.5/25 bar
- Diaphragm material: NBR
- Process connection: 1/4", BSP thread
- Material : Brass
- Accessories : IP65 cover cap

#### Application:

- Monitoring the Overpressure of Combustible Gases
- Gas Burner, Boiler Pressure

#### **Differential Pressure Transmitter for Liquids**

# Model: 988 (Make: Beck GmbH)

#### Specification:

- \* Range: 0-2.5, 0-6, 0-10 bar (other on request)
- ❖ Supply: 18 30 V AC/DC
- Output signal: 0-10 Volt & 4 to 20 mA
- Process connection: 2 x inner thread G1/4 Axial
- Accuracy: +/- 0.4% (typ.) / +/- 1.0 (max.)
- Protection class: IP65

#### Application:

- Secondary Variable Pump Control in Chiller Management
- Cooling Systems for Heating / Air Conditioning

# **Compact Liquid Vibrating Fork Level Switch**

# Model: LFV 12 (Make: Trumen)

#### Specification:

- ❖ Industrial power supply (15 to 80 VDC or 15 to 260 VAC).
- Low power consumption.
- No calibration required.
- Threaded & hygienic process connection.
- Suitable for side as well as top mounting.
- ❖ Minimum 1/2" process connections
- ❖ High pressure up-to 15 bar
- High temperature up-to 150 °C available

# Applications:

 Used as a Full, Empty & Demand Alarm in Fluid Containers, Tanks Containing Liquids of Various Types, Including Milk & Milk Products, Edible Oil, Fuel Oil, Lube Oil, Brewery etc.

# **Conductivity Level Switch**

# Model: LWS (Make: Trumen)

#### Specification:

- Enclosure: Aluminium non-Hazardous IP-65/68
- Sensor type : Rigid rod / rope (PTFE insulated)
- ❖ Material temperature : max 200 °c.
- Sensor MOC: SS304
- Customized process connections
- ❖ Power supply: 12-260 VAC/12-60 VDC
- Output: 1 DPDT relay
- Customize probe length available

#### Application:

Level Measurement for Chemical Storage Vessel in CIP Process

## **Ultrasonic Level Transmitter**

# Model: TLU (Make: Trumen)

#### Specification:

- Compact Size
- User Friendly menus
- Temperature Compensation Two-wire loop-powered
- Simple Installation & Maintenance
- \* RS232, RS485, Modbus
- Various output types
- LCD display
- **Applications:** Sedimentation Tank
  Sewage Treatment
  FO Tank Level



















#### **Capacitance Level Transmitter**

#### Model: TLC (Make: Trumen)

#### Specification:

- Compact size
- Rigid rod/flexible rope versions
- Wide range industrial dc power supply (15 60 VDC)
- Loop powered device (two wire)
- No potentiometers hassle free calibration
- Various customized process connections available
- Remote electronics version available on request
- Process temperature max. 200 °C
- Suitable for corrosive liquids

#### Application:

Level Measurement for Chemical Storage Vessel in CIP Process

## **Hydrostatic Continuous Level Transmitter**

#### Model: TLH (Make: Trumen)

# Specification:

- Compact size
- Wide range industrial dc power supply (12 to 36 VDC).
- Loop powered device (2 wire).
- No calibration required.
- Customized process connections
- ❖ Accuracy +/- 0.25% of FS.
- Suitable for corrosive liquids
- Process pressure max. 200 mH2O
- Process temperature max. 80 °c.

# Application

- Pressure Sensor for Hydrostatic Level Measurement at Bore Well, Well etc.
- ❖ Deep Submersible Liquid Level Measurements ❖ Ice Silo Level Measurement

## **Vibrating Fork Level Switch for Solid**

#### Model: LSV (Make: TRUMEN)

#### Specification:

- Enclosure: Aluminium non-Hazardous IP-66/68
- Process Temperature : upto 200°C
- Sensing surface material: SS-316
- Process Connection : Customize
- Process Connection material: SS-316
- Universal supply 15-60VDC & 15-260VAC
- Output: 1 x DPDT potential-free relay output
- Switching : Single-point level switching
- Relay rating: 5A 230VAC, 5A 24VDC for resistive loads
- Probe length: 125 2000 mm (other on request)

# Application

Level Measurement of Free Flowing Powders and Granules (size max. 10mm) in Hopper, Silo & Vessel

## Milk Silo Level Transmitter

# Model: PiezoSwitch PS (Make: Hengesbach)

#### Specification:

- Output signal 4...20mA, 2 wire
- Max. 2 PNP-switching outputs, 24V DC, max. 50mA,
- With indicator for switching status
- LED-display for measurement reading
- Easy configuration and operating modus with 3 buttons
- Menu-driven configuration on site
- ❖ Free programmable measuring Ranges from -1/0 up to 30bar, TurnDown 4
- Process connections G1" elastomer-free sealing cone, turnable or EHEDG
- EL-ASEPTIC certified modular system PZM, with more
- than 20 different process connection adapters and weld-in sockets
- ❖ Process Temperature -40°C up to 125°C/ 140°C 1h during CIP & SIP-processes

#### Application:

- \* Level measurements in tanks with high pressure or vacuum load & low filling height
- Highly precise measurement of content Pressurized Tanks / Vacuum Measurements with high temperatures





- 48 x 96 mm, panel mounting type
- Drip-proof/Dust-proof IP66 (for front panel only)
- Power supply: 100 to 240 VAC (standard)
- 2-points Contact output (standard)
- Proportional control, max. 4 points of relay contact
- Various settings & calibration via software communication (RS-485) (optional)

## Application:

❖ Water Treatment ❖ Low Iconic Boiler Feed Water ❖ ETP

Note: Suitable Electrode will provide along with Transmitter

Liquid Analyzer - pH/ ORP/ Optical Dissolve Oxygen Sensor

Total Chlorine, Free Chlorine, Chlorine Dioxide, Ozone, or Hydrogen Peroxide Measurement

# Make: Kuntze Instrument **Specification:**

- ❖ Automatic cleaning by ASR® possible
- Low maintenance due to gel filling
- Stable zeropoint
- High quality Zirkon® junction for reliable measurement results
- Max. Pressure: < 10 bar at 20 °C</p>
  Temperature: -5...+70 °C
- Electrode Material: 2 Gold rings
   Process Connection: M12 Plug

#### **Measuring Parameter**

- \* Total Chlorine, Free Chlorine & Chlorine Dioxide: Up to 1000  $\mu$ g/l; up to 5,00; 10,00; 20,00 mg/l
- Ozone : Up to 1000 μg/l ; up to 5,00 ; 10,00 mg/l
- Hydrogen Peroxide: Up to 30,00 mg/l

Drinking WaterProcess Water

# Application:

- **Inline Optical Brix Monitor**

## Model: DCM-20 (Make: KxS Technologies) Specification:

Refractive Index range: Full range, nD=1.3200...1.5300 (= definition to 0...100%wt)

- Output units: Brix/ Conc% / g/cm3 / refractive index unit RIU
- Measurement precision: ±0.025 Brix/%wt Accuracy: ±0.0002 RIU
- Speed of response: 1 sec. undamped
- \* Temperature compensation: Automatic, individual zero point calibration
- Hygienic design: 3-A Sanitary Standard 46-04 and EHEDG Type EL Class I certified.
- $\ \, \ \, \ \,$  Process connection : 1.5" & 2.5" sanitary connection, Varinline® and APV tank bottom flange
- Process pressure: 9-55 bar
- ❖ Process temperature : -40°C ...100°C continuous process temperature Withstands 130 °C CIP and SIP sequences
- Sensor protection class: IP67, Nema 4X
- Power Supply : 24 VDC
- Output: 2 pcs independent 4-20 mA user configurable outputs

# Application:

- Dairy evaporators and Spray dryers
- Whey protein concentrate membrane filtration systems
- Lactose Sugar concentration measurement

## Compact Turbidity sensors

# Model: EXspect & Explore (Make: Exner) Specification:

- Compact design with integrated amplifier and touch display
- %-turbidity or custom defined unit
- Durable sapphire lens
- Hygienic Design, CIP/SIP-capable
- LED light source guarantees a durable and stable signal
- Easy parameterization via display or software EXpert

# Application:

- Precise phase separation Control of separators
- Filter monitoring CIP return line
- Product/ water push to save water and milk
- Monitoring of product changes



















Waste Water Treatment









#### **Broken Bag Detector & Stack Loss**

Model: PFM 13C (Make: Dr. Födisch AG)

#### Specification:

Probe: tribo-electric probe consisting of rod and head

- Probe rod : electrically isolated from housing
- Immersion depth : 500 mm
- Measuring range of dust: 0...100% (qualitative)/0...250 mg/m³ dust
- Analogue output : 4...20 mA, 2-wire transmitter
- Galvanically isolated to device ground
- Power supply : 24 VDC (max. +25%, -10%)
- Exhaust gas temperature : max. 260°C
- Process connection: welding sleeve with Tri-Clamp fastener
- Housing: IP 65, protection class 1

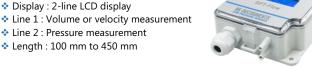
#### Application:

- Broken Bag Leak Detector
- Stack Powder loss Measurement

#### **Air Flow & Velocity Transmitter**

## Model: DPT Flow+ FloXact Series (Make: HK Instruments Oy) Specification:

- \* Range : 0 ... 1000 Pa
- Multiple field selectable measurement
- Measuring Units:
  - Volume flow: m3/s, m3/h, cfm, l/s
  - Velocity: m/s, ft./min
  - Pressure : Pa, inWC, mmWC, kPa, mbar, psi
- With Autozero function
- Supply Voltage: 24 VAC or VDC, ±10 %
- Output: 4 ... 20 mA or 0 ... 10 V, 3-wire
- Accuracy (from applied pressure): 1%
- Protection standard: IP54
- Display : 2-line LCD display
- Line 2 : Pressure measurement
- Length: 100 mm to 450 mm



FloXact-R160

# Application:

\* Air Flow Measurement in Duct

# Air Velocity Transmitter with S - Type Pitot Tube

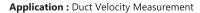
# Model: 985V (Make: Beck GmbH)

# Specification:

- Range : 0 ... 1 KPa (10 mbar)
- Velocity range: 0 ... 30 m/s
- Supply voltage: 18 ... 30 VAC / VDC
- ❖ Output: 4 ... 20 mA or 0 ... 10 V, 3-wire
- With switching output
- Display: LED display, red, 4 digits
- Accuracy: ± 1% FS, min. ± 1 Pa
- Protection class: IP65

# Accessories:

- S-type pitot tube (Stainless steel)
- Length: 500 mm
- ❖ OD : 6 mm
- Mounting type: cleat or flange



# **Digital Process Indicator**

# Model: JIR (Make: Shinko)

# Specification:

- Compact Design
- Galvanic Isolation 1.5 kV
- Sampling Time 125 ms
- 3 Points Alarm output
- User-Friendly Operation and Configuration
- Password Protection for Configuration
- ❖ IP66 Protection Class for Front Flush
- Standard Retransmission Output (4-20 mA, 12000-bit Resolution)
- Lower Power Consumption (8VA), Longer Life of Electronics Modules
- Multi-input: total 18 types of input



**DIN Rail Mounted Signal Isolator & Temperature Transmitter** 

#### Specification:

- Multi-input: total 18 types of input
- Loop break alarm output
- Compact design
- Galvanic isolation 1.5 kV
- Sampling time 125 ms
- User-Friendly operation & configuration
- Password protection for configuration
- Calibration of transmitter by key pad

# Application:

- Digital Safety Temperature Limiter
- Universal Signal Isolator
- DIN Rail Mounted Temperature Transmitter

## **PID Controller**

# Model: BCS Series (Make: Shinko)

#### Specification:

- Convenient Initial setting mode!
- AT on startup function!
- Simplified Program control!
- Simplified converter function!
- A variety of Event Input/Output functions
- Large, Easy-to-view, 5-digit PV, SV Displays:
- Compact, 60 mm-deep control panel interior!
- Simple settings from a PC
- Drip-proof/Dust-proof IP 66
- Control O/P: Relay contact 1a, Non-contact voltage(for SSR drive), Direct current (As per ordering)
- Multi-input: Total 18 types of input
- Sampling Time 125 ms
- Password Protection for Configuration

# **Smart Vibration Sensor**

# Model: HE050 (Make: HAUBER - Elektronik GmbH)

#### Specification:

- Vibration monitoring sensor
- Housing material and fastening: 1.4305 (V2A) with fastening
- M8 x 8; pitch 1.25 mm (standard)
- . Output: 4-20 mA, 3 wire
- Measuring range: 0 –25mm/s rms (other on request)
- \* Electrical connection: M12 connector
- ❖ Measuring head temperature : -40°C ... +85°C
- Protection class: IP 66/67 frequency range: 10 1,000 Hz
- ❖ IO link also available on request

# **Application :** Fan & Bearing Status

Pumps, Centrifuges, Temperature Measurement

## **Positioning System**

# Model: PSE 30x-8 (Make: Halstrup Walcher)

# **Specification:**

- Space-saving, compact design
- Galvanically separated supply voltages for control and performance electronics
- Durable EC-motor
- Extremely accurate positioning due to measurement of the position at the output side
- Easy and low-cost mounting via hollow shaft
- Bus interfaces simplify start-up and wiring complexity
- Address may be set using the bus or an address switch (not for IO-Link)
- Baud rate set via switch
- Status messages retrievable via bus













