Chemical Industry

PARSHVI
TECHNOLOGY (INDIA) PVT. LTD.

Note : All Sensors Available in ATEX and Flame Proof Version.

Represented by :

RTD Probes & Temperature Transmitter

Specification :

RTD Probes

❖ Process Connection : Triclover & Thread
❖ Dia: 6 mm ❖ Length : Customize
❖ Weather proof Aluminium Dia. Head IP 65

Temperature Transmitter (Make : Pixsys)
❖ Programming : Wireless with Mobile Application
   (No wiring required)
❖ Input : Thermocouple/ RTD (PT100/ PT1000)
❖ Output : 4...20mA Loop Powered
❖ Power supply : operating range 6-32 Vdc
❖ Fixing : On DIN/B head
❖ 3600 Point Data Logging

Application : Hygienic/ Utility Process

Non-Contact Infrared Temperature Sensor (Pyrometer)

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 : Dryer Outlet Material Temperature   ❖ Chemical Reactor

Non-Contact Infrared Temperature Sensor for Multi-Channel Systems

Specification :

❖ RS-485 Modbus interface
❖ Measures temperatures from -20°C to 1000°C
❖ Ambient temperatures of up to 120°C without cooling
❖ Compatible with third-party RS-485 Modbus
   Master devices, or Calex touch screen interface
❖ 6-channel temperature display with configuration,
   alarms and data logging
❖ Analogue and alarm relay outputs via optional modules
❖ Build larger systems using the PM180's separate
   Modbus Master and Slave interfaces

Intrinsically Safe Infrared Temperature Sensor

Specification :
❖ Temperature range: -20°C to 1000°C
❖ ATEX, IECEx and UKEX certified up to
   Zone 0 (gas) and Zone 20 (dust)
❖ Certified for use in Japan
❖ 4-20 mA output, two-wire, loop-powered
❖ Optional RS-485 network adapter and USB configuration tool
❖ Supplied with up to 25 m cable
❖ Cable may be extended even further (subject to safety requirements)
   cable runs could extend all the way back to the control room
❖ Stainless steel 316 housing, ideal for offshore applications

Application :
❖ Liquid storage and processing ❖ Condition monitoring

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
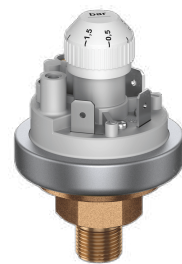❖ Refrigeration and HVAC Controls   ❖ Pumps and Compressors

Adjustable/ Gas / Vacuum Pressure Switch

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

Draft Pressure Transmitter

Specification :
❖ Range : 0-1000mmWC (other on request)
❖ Supply Voltage : 18 ... 30 VAC / VDC
❖ Output : 4 ... 20 mA or 0 ... 10 V, 3-wire or
   4 ... 20 mA, 2-wire is also available
❖ With switching output
❖ Linearity : ≤ ±0.5% FS, min. ±1 Pa
❖ Working temperature : -20 ... 70°C
❖ Protection class : IP65
❖ Display : with LED-display, 4 digits (only for 3-wire)
❖ Process connection P1 and P2 : Stainless steel - Hose pipe
❖ Connection with 4 / 6 mm outer diameter

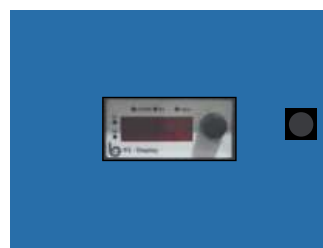**Application :** Dryer
❖ Draft Pressure Measurement of ID/FD Fan

Digital Differential Pressure Transmitter with 2 relays

Specification :

❖ Range : 0 to 2.5 bar
❖ Pressure unit : mmWC, Pa, mbar
❖ Power Supply : screw terminals 24 VAC/VDC
❖ Output : 4 ... 20 mA or 0 ... 10 V, 3-wire
❖ Switching output : 2 relays with 50VAC/5A (S1) an
   250VAC/5A (S2) switching capability
❖ Display : Red 7-segment LED display, 4-figure
❖ Accuracy : ≤ ± 1% of FS
❖ IP65 – SS/ MS enclosure with process connection : 2 - Hose
   connection with 4 mm outer diameter

Application : Scrubber/ De-Duster
❖ Bag Filter Pressure Monitoring

Capacitive Level Switch

Specification :
❖ Output signal : PNP, NPN or Push-Pull, switchable with LED Indication
❖ Supply voltage : 12...32VDC
❖ Electrical connection : M12 x5
❖ Process Temp : 0°C...100°C/max,130°C (<1h)
❖ Process pressure : max 10bar
❖ Process connection: G1/2"
❖ Response time : <0.2sec
❖ Protection category : IP67 according to DIN EN 60529

Application :
❖ Liquid level switch

Membrane/ Boot/ Overflow Level Switch

Specification :
- Product temperature : -20° C – +200°C
- Sensitivity : 200 – 500g adjustable
- Protection : IP65
- Density of the product : 0,3 t/m3 – 2,5 t/m3
- Diphagram material : SS/ NBR

Application : Screw Conveyor / Chute Jam Detection
- Bucket Elevator

Pendulum Level Indicators

Specification :
- Rod lenght : Upto 2000 mm
- Product density : 0,3 t/m3 – 3 t/m3
- Maximum pressure : +0,5 bar
- Switching function : 1 NO + 1 NC
- Capacity of the contact : 15 A / 250 V AC (for resistive loads)
- Bulk good temperature : -25° C – +80° C
- Type of protection : IP66 according to DIN En60529
- Materials : Housing Aluminium, RAL 7001 coated

Application :
- High Level Control in a Coal Bunker

Portable Digital Manometer + Air Velocity Meter

Specification :
- Range : ± 200 Pa
- Velocity range : 5 ... 58 m/s
- Display : 3 1/2″ Digit, LCD
- Accuracy : ± 0.5% of max. value
- Operating temperature : 0 ... 50°C
- Power supply : 9 V battery with calibration certificate

Accessories:
- L - shape pitot tube
- Length : 600 mm
- MOC : Stainless steel
- Process connection : 6 mm hose

Application : Testing and Commissioning Purpose

Air Flow Transmitter with Annubar

Specification :
- Output signal : 4 ... 20 mA
- Operating voltage : 24 VAC/DC (4-wire)
- Measurement range : ±50 Pascal
- Accuracy : ±0.2% FS

Application :
- Air flow measurement

pH Electrode

Specification :
- High alkali high temperature glass
- Measuring range pH 0.. 14
- Very small alkaline error
- Suitable for temperatures up to 110°C (275 °F)
- High quality Zirkon junction for reliable measurement results
- Dirt-repellent and corrosion resistant PTFE junction
- Integrated temperature sensor : Pt 1000
- Electrical Connection : Fixed cable 6 m
- Process Connection : ¾″ NPT
- Reference System: Ag / AgCl / Solid electrolyte
- Max. Pressure : < 10 bar

Application :
- pH Control of a Fed Batch Reactor

Water Quality Monitoring System (pH, Conductivity, Turbidity, Total chlorine, Free Chlorine & Temperature Measurement) with the Cloud Connect

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
- Electrode Material: 2 Gold rings
- Process Connection: M12 Plug
- Connect with the Kuntze Cloud Connect® service

Measuring Parameter
- pH:0.. 14.00 pH
- Conductivity : Up to 2.000, 20.00, 200.0 mS/cm
- Turbidity 0-10 NTU
- Free Chlorine : Up to 1000 µg/l ; up to 5,00 ; 10,00 ; 20,00 mg/l
- Total Chlorine : Up 0-1000 µg/l ; 5,00 ; 10,00 ; 20,00 mg/l

Application :
- Water Process Engineering

Liquid Analyzer - pH/ ORP

Specification :
- 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

Application :
- Water Treatment
- low Iconic Boiler Feed Water
- ETP

Conductivity Analyser

Specification :
- Measuring range: 0 µS/cm – 15000 µS/cm
- Output signal : Digital PNP output or analogue output
- Response time <0.5s
- CIP- / SIP cleaning: 0...+150ºC (30 min)
- Accuracy: 5% of measurement value
- Integrated temperature compensation
- Protection class IP 68
- process temperature: 0...+100ºC
- Probe tip: 316L/1.4404/1.45771
- Process connection G1/2″

Application :
- Water Treatment

Chemical Concentration Transmitter

Specification :
- 2 x analogue output : 4...20mA, IO-link
- Up to 4 freely stored concentration curves, display in percent
- display of conductivity, cocentration and temperature
- very compact and robust version in hygienic design
- housing made of stainless steel
- extremely fast response times

Application :
- Chemical Concentration Measuring in Systems and Processes

Liquid Concentration Transmitter

Specification :
- Robust performance, high accuracy & consistent measurement results in harsh conditions.
- All measurement functions are integrated in the sensor - no transmitter required.
- Special wetted parts available for aggressive process fluids.
- Certified for hazardous areas with certification for ATEX/IEC Zone 2
- Refractive Index range: Full range, nD=1.3200...1.5300 (equal by definition to 0...100%wt)
- Automatic Temperature compensation
- Sensor protection class: IP67, Nema 4X
- Speed of response: 1 sec. undamped
- Power Supply: 24 VDC
- Process pressure: -1...55 bar
- Process temperature: -40°C...150°C
- Output: 2x 4-20 mA and digital (Modbus TCP)
- Measurement accuracy: ± 0.0002 refractive index unit RIU

Application
- Alkalies and chlorine (Hydrochloric acid, Caustic soda, Brine, Sulfuric acid)
- Common chemicals (Ammonium hydroxide, Ammonium nitrate, Ethylene glycol, Formaldehyde, Gelatine, Hydrogen peroxide, Nitric acid, Oleum, Polycarbonates, Resins, Sodium hydroxide, Resins, Urea)
- Fibers and plastics (Acrylics, Caprolactam, natural and man-made fibers, Fiberglass binders solutions, Nylon salt, Textile finishing, coating and dyeing solutions)
- Salts and sodium compounds (Brine, Glauber's salt, Sodium carbonate)
- Other (Ion exchange chromatography: regeneration chemicals of ion exchangers, loading and unloading operations: chemicals interface detection and identification. De-icing preparations manufacturing, spraying and recovery: Ethylene glycol, Propylene glycol. Automotive grade urea solution, AdBlue (AUS32), Diesel exhaust fluid (DEF))

Solid Flow Monitor (BBD Sensor)

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)
- 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/ FBD

Stack Dust Monitoring Device - QAL1 Certified

Specification :
- Compact device with aluminum housing
- Probe rod length : 500 mm
- Measuring range of dust : lowest certificated range 0 -7.5 mg/m³ dust, max. measuring range 0...250 mg/m³ dust
- Exhaust gas temperature : max. 280 °C
- Flow velocity : min. 5 m/s
- Protection degree : IP65
- Analog input : 1 x 4...20 mA for external velocity v [m/s]
- Analog output : 4 ... 20 mA, electrically isolated
- Digital outputs : 4 potential free contacts for failure
- Power supply : 110 V / 230 VAC
- Process connection : welding sleeve with Tri-Clamp fastener

Application : Stack Dust Emissions Measurement

Stack Air Flow Transmitter (QAL1 certified)

Specification :
- Stack Air Flow Meter (QAL1 certified)
- Make: SKI GmbH
- Model: AccuFlo® QAL
- Measuring principle : Differential pressure water-saturated
- Gas: Exhaust gas, flue gas, with dust/particles,
- Measurement range: 2 ... 20 m/s (up to 2 ... 60 m/s)
- Stack/Duct Diameter: DN 100 ... DN 10000
- Power supply: 115/230 V AC (Optional 24 V DC)
- Medium temperature: up to 800°C Higher
- Temperature on request
- Material: 1.4571, Hastelloy

Application :
- Air Flow Measurement in Stack

Vibration Monitoring Sensor

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, 2 wire
- Measuring range : 0 – 16 mm/s rms (other on Request)
- Electrical Connection : M12 connector
- Measuring head temperature : -40°C ... +125°C
- Protection class : IP 66/67
- Frequency range : 10 – 1,000 Hz

Application : Fan & Blower Vibration Measurement

DIN Rail PID Controller

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 :
- Universal Isolated Digital Temperature Transmitter
- Digital Temperature Switch

Digital Process Indicator

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

Exner Retractable Fittings

Specification :
- Robust design, integrated PTFE scraper
- Extension of sensor-lifetime and reducing of maintenance efforts
- Automatic safety lock while sensor is removed
- Plug and play installation, colour- and size-coded connectionsystem
- Integrated limit switches
- Usable in ATEX-areas
- Static probe housing with clamp connection
- Immersion length up to 90mm
- Up to 16 bar and 140 °C
- Stainless steel AISI 316L / 1.4404 or Alloy C22
- Can be fully automated with pneumatic or electro-pneumaticcontrol units
- Drive unit free of maintenanc

Application :
- For all kind of Ø12/120mm sensors with thread PG13.5 (pH-glass- and ISFET sensors, conductivity- or temp sensors, turbidity and other optical sensors)