

konsiqTM
INSTRUMENTATION

Envisol
POWERED BY ARVIND

Arvind Envisol, a division of Arvind Ltd., is a key player in global wastewater & solid waste recycling. From OEMs to end customers, we provide comprehensive solutions in projects, services, and components. Our 5 divisions include:

- | | | |
|--------------------|---|--------------------------------------|
| 1. Projects | 3. Standard Equipment, Components & Chemicals (SECC) | 4. Solid Waste Recycling |
| 2. Services | | 5. Centre of Excellence (CoE) |

addressing complex challenges in water & solid waste management with cutting-edge innovations. Transforming Water & Solid Waste Management Globally.

SECC: Your Partner in Industrial Excellence. Standard Equipment, Components & Chemicals, leads in manufacturing industrial products for Water & Solid Waste Management and beyond. Backed by rigorous testing and a commitment to excellence, SECC delivers superior performance in wastewater & solid waste treatment, waste handling and specialized components. Our diverse portfolio includes the below brands and subsequent category products:

- **KaiGO** FRP & Polymer components
- **Segmo** Solid Liquid Separation
- **Cirflo** Pipe, Fittings and Valves
- **Qurem** Membranes & Filters
- **Konsiq** Instrumentation
- **Orroto** Rotating Equipment
- **Verlec** Electrical
- **Gemistro** Chemicals
- **Listra** Spares, Tools and safety

As a dedicated industry participant, Arvind Envisol remains unwavering in our commitment to excellence, positioning ourselves as a reliable partner for project success across domains like project, service, and component needs. Today, our growing client portfolio trusts us for world-class components and services to purify, replenish, and recycle water & solid resources.

LIST OF INSTRUMENTS

1 FLOW

- 1.1 Electromagnetic
- 1.2 Vortex
- 1.3 Rotameter

2 PRESSURE

- 2.1 Pressure Gauge
- 2.2 Pressure Switch
- 2.3 Differential Pressure switch
- 2.4 Pressure Transmitter Pencil Type
- 2.5 Pressure Transmitter Smart Type

3 TEMPERATURE

- 3.1 Temperature Gauge
- 3.2 Temperature Transmitter

4 LEVEL

- 4.1 Tubular Type Level Gauge
- 4.2 Float & Board Type Level Gauge
- 4.3 Magnetic Type Level Gauge, Switch & Transmitter
- 4.4 Displacer Type Level Switch
- 4.5 Guided float Type Level Switch
- 4.6 Mini float Type Level Switch
- 4.7 Suspended float Type Level Switch
- 4.8 Ultrasonic Type Level Transmitter
- 4.9 Non-Guided Radar Type Level Transmitter
- 4.10 Guided Radar Type Level Transmitter

5 ANALYZER

- 5.1 pH Analyzer
- 5.2 Conductivity Analyzer
- 5.3 ORP Analyzer
- 5.4 DO Analyzer
- 5.5 COD-BOD Analyzer



1. FLOWMETER

1.1 ELECTROMAGNETIC FLOWMETER

Type of Mounting	Integral / Remote
Meter Size	15, 20, 25, 32, 40, 50, 65, 80, 100, 125, 150, 200, 250, 300 nb
Process Connection	Flanged ANSI 150
Process Connection - MOC	MS powder coated
Electrode - MOC	SS316L / Hastelloy C
Lining - MOC	PTFE
Coil Housing	SS316
Power Supply	230 v AC & 24 v DC
Output	4 to 20 mA
Communication Interface	RS485 Modbus



KEY FEATURES

- **Accuracy:** $\pm 0.5\%$ FSD
- **Universal Power Supply:** 85 V AC-270 V AC, 50 Hz-60 Hz / 24 V DC
- **Bidirectional measurements:** Flow & Totalizer measurements that can be made in both directions-forward and backward
- **Protection:** Weather Proof IP 67
- Broad Measuring Range, this device is suitable for a wide range of applications
- Designed for tough settings and highly corrosive or abrasive liquids, this material is resistant to wear and tear
- Unaffected by fluid characteristics: The flow meter's measurement accuracy is unaffected by variations in the temperature, pressure, density, or viscosity of the fluid
- Inbuilt surge protection
- Empty pipe alert

1.2 VORTEX FLOWMETER

Meter Size	15, 20, 25, 32, 40, 50, 65, 80, 100, 150, 200, 250, 300 nb
Electrode - MOC	SS136L
Electronic Housing - MOC	Die Cast Aluminium
Process Connection	Flanged, ANSI B16.5, MOC - SS316L
Power Supply	24 v DC
Output	4 to 20 mA with HART Pulse
Add-on options	RS485 Modbus

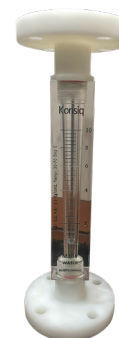


KEY FEATURES

- Vortex Flow Meter have temperature & pressure compensation feature
- Change in temperature & pressure of fluid does not affect the performance of Vortex Flow Meter
- Design of 14 level digital bandpass filter

1.3. ROTAMETER

Type	Inline (upto 80 nb) / Bypass above 80 nb
Flow Range	0 to 50000 LPH
Flowtube - MOC	Acrylic
Float - MOC	SS136L
Flange - MOC (Inline)	PP
Carrier Ring - MOC (for bypass)	MS/SS316L
Orifice Plate (for bypass)	SS316L
Body - MOC	Acrylic



KEY FEATURES

- **Accuracy:** $\pm 1\%$ FSD
- Individually calibrated Rotameter
- Laser Engraved Scale
- Virgin Acrylic Square / Round Block
- Flange / Fitting made from single solid piece

2. PRESSURE

2.1 PRESSURE GAUGE

Type	Bourdon
Nominal Dial Size	2.5 / 4 / 6 inch
Pressure range	- 760 mmhg ... 0 ... 100 bar
Type of mounting	Bottom connection
Case Filling Fluid	Silicone or Glycerine (purity 99.7%)
Bourdon Tube & Socket - MOC	SS316L
Add-on options	<ul style="list-style-type: none"> • Flush Diaphragm (MOC: SS316L / Hastelloy C) • Seal Diaphragm (MOC: SS316L / Hastelloy C) • Siphon • Snubber Gauge Cock - 2 way



KEY FEATURES

- **Accuracy:** ±1% FSD
- **Repeatability:** ±0.5% of FSD
- **Over Range Protection:** 150% of range
- **Enclosure Protection:** Weather Proof IP 68

2.2 PRESSURE SWITCH

Type	Diaphragm Sealed (up to 40 bar) / Piston type above 60 bar
Type of Mounting	Bottom Connection
Differential Adjustment	Fixed / Adjustable
Micro Switch	1 SPDT Snap Action
Enclosure	Aluminium Die Cast Weather Proof to IP-66
Add-on options	<ul style="list-style-type: none"> • Wall & Pipe Mounting Bracket (MOC: MSEP) • Gauge Cock - 2 Way



KEY FEATURES

- **Response Time:** < 1 Sec
- **Accuracy:** ±1% FSD
- **Over Range Protection:** 2 times of range
- **Enclosure Protection:** Weather Proof IP 68
- **Switch Type:** Micro Switch with Auto Reset
- **Contact Resistance:** < 100 mΩ
- **Insulation Resistance:** > 100 MO (Mega Ohm) @ 100 VDC
- **Set Point:** Between 20% to 80% of FS for better performance externally/ internally adjustable with locking system

2.3 DIFFERENTIAL PRESSURE SWITCH

Type	Diaphragm Sealed (up to 40 bar) / Piston type above 60 bar
Type of mounting	Bottom Connection
Differential Adjustment	Fixed / Adjustable
Micro Switch	1 SPDT Snap Action
Enclosure	Aluminium Die Cast Weather Proof to IP-66
Add-on options	<ul style="list-style-type: none"> • Wall & Pipe Mounting bracket (MOC: MSEP) • Gauge Cock - 2 way



KEY FEATURES

- **Response Time:** < 1 Sec
- **Accuracy :** ±1% FSD
- **Over Range Protection:** 2 times of range
- **Enclosure Protection:** Weather Proof IP 68
- **Switch Type:** Micro Switch with Auto Reset
- **Contact Resistance:** < 100 mΩ
- **Insulation Resistance:** > 100 MO (Mega Ohm) @ 100 VDC
- **Set Point:** Between 20% to 80% of FS for better performance externally/ internally adjustable with locking system

2.4 PRESSURE TRANSMITTER PENCIL TYPE

Measurement Range	(-1) to 1 / 0 to 10 / 0 to 30 / 0 to 60 / 0 to 100 kg/cm ²
Case - MOC	SS304
Diaphragm - MOC	SS316L
Process Connection	½" NPTM
Electrical Connection	Plug Type Connector
Add-on options	Coating Element (Heat sink)



KEY FEATURES

- **Accuracy:** ±0.05% FSD
- For applications in gases, fluids and hydraulics
- Robust and durable even under extreme conditions
- Easy process implementation
- Any standard industrial connection available
- Made in Italy

2.5 PRESSURE TRANSMITTER SMART TYPE

Measurement Range	0 to 100 kg/cm ²
Diaphragm - MOC	SS136L / Hastelloy C
Sensor Type	Piezo Electric
Type	2 Wire
Power Supply	24V DC (Loop Powered)
Output	4 to 20 mA
Local Indicator	Digital LCD Integral Display
Electrical Connection	½" NPT
Process Connection	½" NPTM
Add-on (options)	HART Communication



KEY FEATURES

- **Accuracy** : ±0.05% FSD
- Multi measure range selection
- Digital LCD display
- Convenient debugging for zero range
- Reverse polarity & current limiting protection
- High performance
- High precision & stability

3. TEMPERATURE

3.1 TEMPERATURE GAUGE

Type	Bimetallic / Gas
Nominal Dial Size	Ø 100 mm
Temperature Range	0°C to 200°C or equivalent °F
Type of mounting	Bottom connection
Stem Length	100 & 200 mm
Stem Diameter	6 / 8 mm
Add-on options	• Thermowell (Solid Bar Stock Type)



KEY FEATURES

- **Response Time:** Check at 63% of range from ambient temperature < 30 Sec
- **Accuracy:** ±1% FSD
- **Enclosure Protection:** Weather Proof IP68
- **Joints:** Argon welded
- Bi Metallic Helix (Imported)

3.2 TEMPERATURE TRANSMITTER

RTD Type	Simplex / Duplex
Temperature Range	0°C to 200°C
Stem Length	100 & 200 mm
Stem Diameter	6 / 8 mm
Process Connection	Threaded - ½" NPT M / Flanged - 1½" 150#
Transmitter Type	Head Mount
Thermowell Type	Solid Bar Stock



KEY FEATURES

- **Accuracy:** ±0.05% FSD
- Adjustable extension
- Mineral insulated
- Exchangeable insert
- Spring loaded design
- Sensor Type flexibility
- Excellent robustness against interferences
- Economical & Easy to install

4. LEVEL

4.1 TUBULAR TYPE LEVEL GAUGE

Body - MOC	PP
CC Distance	400 to 3000 mm
Glass Size	19 mm
End Block - MOC	PP
Mounting Type	Side Mounted



KEY FEATURES

- H Grade Borosilicate glass tube 19mm outer dia with Teflon Packing
- Glass tube can be removed online i.e. without disconnection from vessel
- Gland packing design provides tension free tube installation to achieve zero leakage. It also enables glass removal for replacement or cleaning without dismantling the gauge or disconnection from the vessel
- Scale with 5 mm resolution as standard
- Vent & Drain with plug

4.2 FLOAT & BROAD TYPE LEVEL GAUGE

Body - MOC	PP
CC Distance	3000 to 10000 mm
Float Dimension	300 mm
Guide Wire Rope Size	3 mm
Guide Wire Rope - MOC	SS316 Metal with PU coated
Mounting Type	Side Mounted

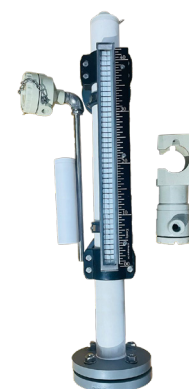


KEY FEATURES

- **Accuracy:** ± 5 mm
- Float dimension 300 mm
- 6" wide FRP Black Scale with White graduations & numerical
- Gauge board marking visible from distance
- Nylon pulleys with weather proof Pulley housings

4.3 MAGNETIC TYPE LEVEL GAUGE, SWITCH & TRANSMITTER

Body & Float - MOC	PP / SS304 / SS316L
CC Distance	400 to 3000 mm
End Block - MOC	PP
Mounting Type	Side Mounted



KEY FEATURES

- **Accuracy:** ± 2 mm
- **Indication:** Bicolored Flappers
- Flanged to the tank for indicating level of liquids and liquefied gases in open or closed tanks
- Used in high temperature and pressure applications

4.4 DISPLACER TYPE LEVEL SWITCH

Float & Rope - MOC	PP / SS304
Float - NOS	1x1 / 2x2 / 3x3
Measurement Range	2000 to 6000 mm
Switching	1 SPDT / 2 SPDT
Process Connection	65 NB ANSI B 16.5, 150#
Process Connection - MOC	PP / SS304
Electrical Connection	½” NPT(F), 2 nos.
Mounting Type	Top Mounted



KEY FEATURES

- Versatile for level control and have advantages over float type switches
- Micro Switch Operated rated at 5 or 15 Amp 220 VAC
- Displacer Adjustable at any point
- Flame Proof/Weather Proof Connection Box
- Die-Cast Aluminium Flame Proof zone IIA IIB

4.5 GUIDED FLOAT TYPE LEVEL SWITCH

Float & Rope - MOC	PP / SS304
Float - NOS	1x1 / 2x2 / 3x3
Measurement Range	675 to 3500 mm
Switching	1 SPDT / 2 SPDT
Process Connection	65 NB ANSI B 16.5, 150#
Process Connection - MOC	PP / SS304
Electrical Connection	½” NPT(F), 2 nos.
Mounting Type	Top Mounted



KEY FEATURES

- Very reliable yet a low cost instrument
- Available in Single & Multiple Floats
- Flame Proof/Weather Proof Connection Box
- Die-Cast Aluminium Flame Proof zone IIA IIB

4.6 MINI FLOAT TYPE LEVEL SWITCH

Float & Rope - MOC	PP / SS304
Float - NOS	1x1
Process Connection	⅜” or ½” BSP
Process Connection - MOC	PP / SS304
Electrical Connection	½” NPT(F), 2 nos.
Mounting Type	Side Mounted



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KEY FEATURES

- Reliability with fast and easy installation
- Ideal for general applications like water, diesel and oils
- Threaded male / female adopter with lock nut / round / rectangular mounting plate

4.7 SUSPENDED TYPE LEVEL SWITCH

Float Type	Biconical
Float	PP
Cable Length	3 / 5 / 10 Meter
Electrical Connection	1/2" NPT(F), 2 nos.



KEY FEATURES

- Simple, reliable, economical, long life and maintenance free
- 3 to 10 Mtrs. Cable Length with adjustable counter weight
- Non Toxic Polypropylene float

4.8 ULTRASONIC TYPE LEVEL TRANSMITTER

Measurement Range	0 to 5 / 10 / 15 mts.
Sensor - MOC	PP / PTFE / PBT
Seal - MOC	PVDF / PTFE / PBT
Transmitter - MOC	Polycarbonate (PC) / Aluminium
Power Supply	24V DC (Loop Powered)
Output	4 to 20 mA
Process Connection	80NB, ANSI B 16.5, 150#
Electrical Connection	1/2" NPT(F)
Beam Angle	5.5°
Mounting Type	Top Mounted
Add-on (options)	Canopy



KEY FEATURES

- **Protection:** IP68
- Real time self-monitoring on voltage, current and chip. Output warning when abnormality present
- Wave management concept. To help understand abnormal output, Stores echo auto-matically

4.9 NON-GUIDED RADAR TYPE LEVEL TRANSMITTER

Measurement Range	0 to 10 / 15 mts.
Sensor - MOC	PP / PTFE
Seal - MOC	PVDF / PTFE



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Transmitter - MOC	Polycarbonate (PC) / Aluminium
Power Supply	24V DC (Loop Powered)
Output	4 to 20 mA
Process Connection	80NB, ANSI B 16.5, 150#
Electrical Connection	1/2" NPT(F)
Beam Angle	3° to 4°
Mounting Type	Top Mounted
Add-on (options)	Canopy

KEY FEATURES

- **Protection:** IP68
- Real time self-monitoring on voltage, current and chip. Output warning when abnormality present
- Wave management concept. To help understand abnormal output, Stores echo auto-matically

4.10 GUIDED RADAR TYPE LEVEL TRANSMITTER

Measurement Range	0 to 6 / 10 mts.
Sensor - MOC	Stainless Steel
Carrier	Rod / Cable
Seal - MOC	PTFE
Enclosure - MOC	Die Cast Aluminium with Epoxy Coating
Power Supply	24V DC (Loop Powered)
Output	4 to 20 mA
Process Connection	80NB, ANSI B 16.5, 150#
Electrical Connection	1/2" NPT(F)
Mounting Type	Top Mounted
Add-on (options)	Canopy



KEY FEATURES

- **Accuracy:** ±0.05%
- **Protection:** IP68
- Isolated emitting and receiving signal enable full range measurement without dead zone
- Unaffected by build-up or condensation near sensor
- Real time self-monitoring on voltage, current and chip. Output warning when abnormality present
- Wave management concept. To help understand abnormal output, Stores echo auto-matically

5. ANALYZER

5.1 pH ANALYZER

Type	Single Channel
Mounting - Type	Panel / Field Mount
Flow Through Chamber - MOC	PVC / SS316L
Sensor Cover - MOC	PPS
Electrode	Double Junction
Measurement Range	0 - 14 pH
Temperature Compensation	Auto / Manual
Connection	½" NPTF
Instrument Dimensions	130 x 130 x 180 mm
Add-on (options)	<ul style="list-style-type: none"> • Additional Relay Output • RTD • IP68 Enclosure



KEY FEATURES

- **Accuracy:** ± 0.01 pH (for pH transmitter)
- Microcontroller base
- Independent display of pH & Temperature
- Automatic pH standardization
- Automatic buffer recognition (4.00, 7.00, 9.2)
- The Unit retains calibration point even when there is a power failure or the unit is switched off
- Automatic checks the electrode behaviour, Error Indication, Alerts you to problems Configuration, Programming, operation & Calibration by front panel keys
- Special digit shift key facilities quick change of value
- By default single relay output

5.2 CONDUCTIVITY ANALYZER

Type	Single Channel
Mounting - Type	Panel / Field Mount
Flow Through Chamber - MOC	PVC / SS316L
Sensor - MOC	SS316L / Platinum
Sensor Cover - MOC	SS316L
Electrode	Double Junction
Sensor - K Factor	K = 0.01 / 0.1 / 1
Measurement Range	0 to 100 / 1000 / 10000 $\mu\text{S}/\text{cm}$
Temperature Compensation	Auto / Manual
Connection	½" NPTF



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Instrument Dimensions	130 x 130 x 180 mm
Add-on (options)	<ul style="list-style-type: none"> • Additional Realy Output • IP68 Enclosure

KEY FEATURES

- **Accuracy:** ±1 % of reading for conductivity transmitter
- Microcontroller base
- Independent display of Conductivity & Temperature
- Any type of Conductivity Cell can be used
- Any value of Cell Constant can be used
- The Unit retains calibration point even when there is a power failure or the unit is switched off
- Automatic checks the cell behaviour, Error Indication, Alerts you to problems
- Configuration, Programming, operation & Calibration by front panel keys
- Display Cell constant value at time of calibration
- By default single relay output

5.3 ORP ANALYZER

Type	Single Channel
Mounting - Type	Panel / Field Mount
Flow Through Chamber - MOC	PVC / SS316L
Sensor Cover - MOC	PPS with Platinum Rod
Electrode	Double Junction
Measurement Range	-2000 - 2000 Mv
Connection	½” NPTF
Instrument Dimensions	130 x 130 x 180 mm
Add-on (options)	<ul style="list-style-type: none"> • Additional Relay Output • IP68 Enclosure



KEY FEATURES

- **Accuracy:** ±0.01% mv (for transmitter)
- Microcontroller base
- Independent display of Actual value (e.g. ORP) and Set Value (e.g. ORP)
- Non volatile memory to store Program data at power fail
- RS232/485 communication port or printer interface
- Configuration, Programming, operation & Calibration by front panel keys
- Digit shift key for speedier setting
- Manual Reset/ Calibration
- Data logging for 4k memory
- By default single relay output

5.4 DO ANALYZER

Mounting - Type	Panel / Field Mount
Flow through chamber - MOC	PP / SS316
Sensor - MOC	PCV / SS316
Measurement Range	0 to 20 ppm, 0 to 200% Saturation
Sensor Cable	6 mts. (Optional cable length available up to 100 mts.)
Relays	2 nos. Electromechanical SPDT; 10A; 115 / 230 VAC
Connection	½” NPT
Instrument Dimensions	48 x 96 x 75 mm



KEY FEATURES

- **Accuracy:** ±0.5%
- 4 - 20 mA output from sensors enables seamless connectivity to field transmitters or PLC / DCS
- No electrolyte solution to replenish
- Guided deep pipe arrangement
- Replaceable sensor cap
- Saltwater compensation
- Sample flow not necessary for measurement accuracy
- The sensor come with a close of PVC Body version
- Sensor cable length upto 100 meters allow flexibility in the field

5.5 COD-BOD ANALYZER

Type	Single Channel / Dual Channel
Mounting - Type	Panel / Field Mount
Flow through chamber - MOC	PP / SS316L
Sensor - MOC	SS316 / Titanium
COD Measurement Range	0 to 300 / 800 / 2000 / 5000 mg/l
BOD Measurement Range	0 to 100 / 400 / 1000 / 2500 md/l
Output	4 to 20 mA / RS485
Connection	½” NPT
Instrument Dimensions	150 x 139 x 80 mm



KEY FEATURES

- **Accuracy:** ±0.5%
- Open Modbus RTU communication
- Low-cost alternative to analog measuring points
- Guided deep pipe arrangement
- Integrated data logger with service logbook
- WiFi for communication via web browser
- Without sampling and preparation of test samples
- Real-time sensor
- Without reagents
- Optical window with nano coating
- LED technology

SECC BU Clientele



Standard Equipments, Components and Chemicals (SECC Business Unit)

KAIGO[™]

FRP & POLYMER COMPONENTS

- Membrane Housings
- Pressure Vessels, Storage Tanks (HDPE, FRP, PP etc.)
- Micron Cartridge Filters
- Diffusers, MBBR Media

Verlec
ELECTRICAL

- Panels (PCC, MCC, PLC, VFD)
- Induction motors
- Cable - Power, Control, Instrumentation

Orroto[™]
ROTATING EQUIPMENT

- Pumps – high pressure, centrifugal, dosing
- Blowers, Compressors
- Agitators, Gearbox

konsiq[™]
INSTRUMENTATION

- Flowmeters / Rotameters
- Pressure-Level-(Gauge/Switch/Transmitter
- Analyzers (pH, ORP, DO Conductivity

Qurem[™]
MEMBRANES & FILTERS

- UF Membranes
- MBR Membranes
- RO Membranes

segm[™]
SOLID-LIQUID SEPARATION

- Filter press, Screw Press
- HRSCC/Clarifier, DAF
- Sludge dryer
- Pusher Centrifuge

Listra
SPARES | TOOLS | SAFETY

- Bearings, Mechanical seal
- Timer belts
- Fasteners, Tools, Inserts
- Safety items (shoes, jacket)

cirflo[™]
PIPE | FITTINGS | VALVES

- Valves (Ball, Butterfly, Gate, Globe, Check)
- Metallic/Non-Mettalic Pipe & Fittings

Qemistro[®]
CHEMICALS

- Water treatment/ cooling tower/boiler chemicals
- Paints/coatings
- Oil, grease & lubricants

Envisol
POWERED BY **ARVIND**

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