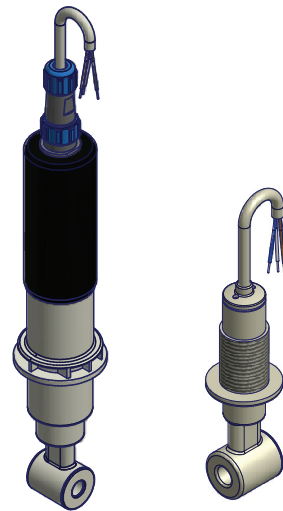


## Inductive conductivity probe

## FEATURES

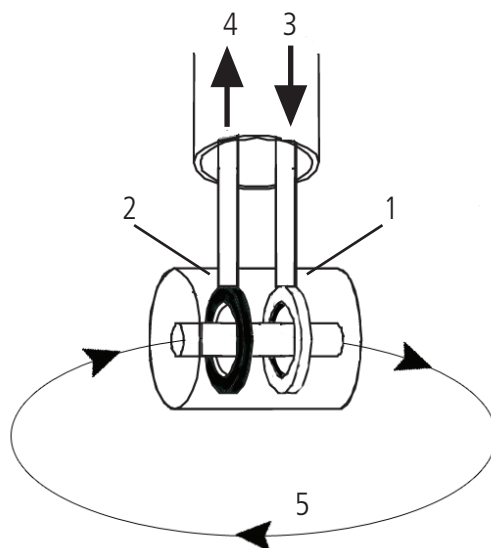
- Conductivity measure throughout inductive sensor.
- The inductive sensor design eliminates polarization errors and electrode coating problems that commonly affect conventional conductivity contacting-electrode models.
- PT100 (or NTC or any) temperature compensation.
- High pressure (8 bar) and temperature (up to 85°C) specifications.
- Wide conductivity range (up to 300 mS).

**Inductive conductivity measurement technique: operating principle**

Inductive conductivity sensor induces a low current in a closed loop of solution, then measures the magnitude of this current to determine the solution's conductivity.

The conductivity probe drives Toroid A, inducing an alternating current in the solution. This current signal flows in a closed loop through the sensor bore and surrounding solution.

Toroid B senses the magnitude of the induced current which is proportional to the conductance of the solution.



- 1 - Toroid A
- 2 - Toroid B
- 3 - Alternate current generator
- 4 - Receiver
- 5 - Induced current in the solution

## Inductive conductivity probe

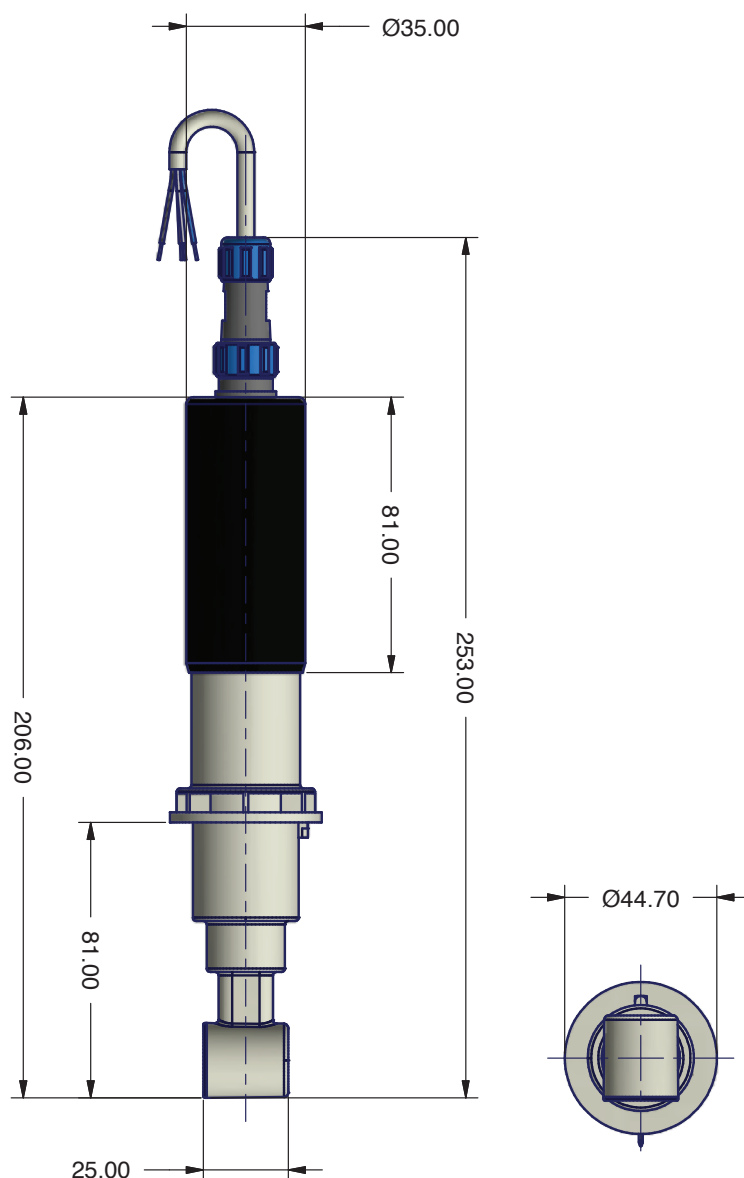
## ECDIND PT

|                     |                                                   |
|---------------------|---------------------------------------------------|
| Analysys system:    | inductive                                         |
| Temperature:        | 85° C (185°F); 100°C (212°F) in spot measurements |
| Pressure max:       | 8 bar (116 PSI)                                   |
| Cable/connector:    | G1 and NPT ¾"                                     |
| Cable length:       | 4 mt                                              |
| Material:           | PEEK                                              |
| Temperature sensor: | PT100                                             |
| Probe holder:       | PEL-IND; PEL INDC; PEL IND SS; NPED-IND; PEC IND  |

| Model           | Range                           | Pressure<br>(Bar) | Temperature<br>(°C) | Cable<br>(m) | Body | Compensation |
|-----------------|---------------------------------|-------------------|---------------------|--------------|------|--------------|
| <b>ECDINDPT</b> | 0,1-3 mS; 0,3-30 mS; 0,3-300 mS | 0 - 8             | 0 - 85              | 4            | peek | PT100        |

## DIMENSIONS

expressed in mm



## Inductive conductivity probe

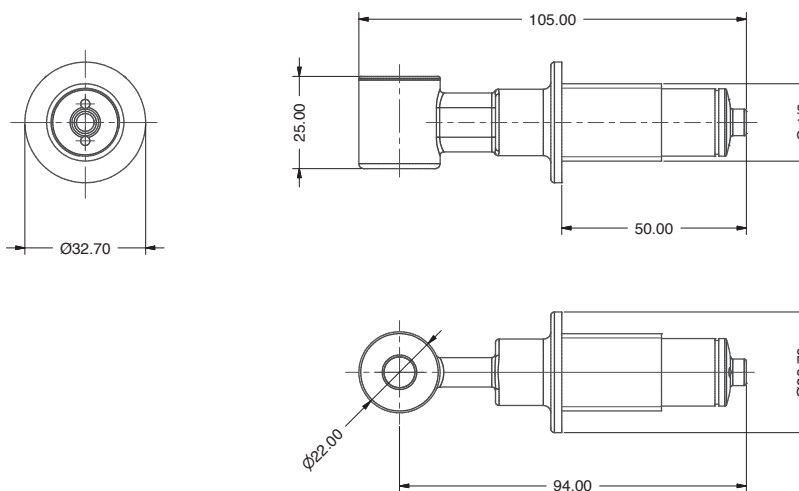
## ECDSIND PT

|                     |                                                   |
|---------------------|---------------------------------------------------|
| Analysys system:    | inductive                                         |
| Temperature:        | 85° C (185°F); 100°C (212°F) in spot measurements |
| Pressure max:       | 8 bar (116 PSI)                                   |
| Cable/connector:    | G1 and NPT 3/4"                                   |
| Cable length:       | 4 mt                                              |
| Material:           | PEEK                                              |
| Temperature sensor: | PT100                                             |
| Probe holder:       | NPED-INDS; NPED4-INDS                             |

| Model     | Range     | Pressure<br>(Bar) | Temperature<br>(°C) | Cable<br>(m) | Body | Compensation |
|-----------|-----------|-------------------|---------------------|--------------|------|--------------|
| ECDSINDPT | 0,3-10 mS | 0 - 8             | 0 - 85              | 4            | peek | PT100        |

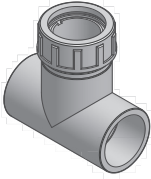
## DIMENSIONS

expressed in mm



## Inductive conductivity probe

## PROPER INSTALLATION



The process flow must be directed through the hole.

The inductive conductivity measurement technique requires a process fluid surrounding the sensor.

