

## EMCO Conductivity Sensors with Internal Electrodes series 611

### APPLICATIONS

The EMCO conductivity sensor is designed to monitor high and low conductivity process liquids.

### INDUSTRIES

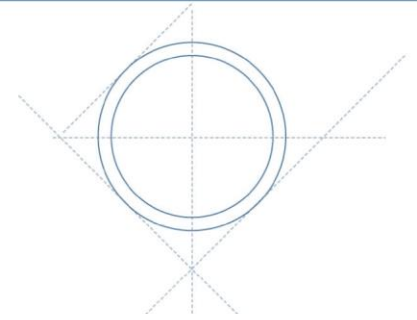
Power plants, conventional and nuclear. Pulp & Paper. Oil & Gas industry. General food and Beverage industries. And other liquid handling industries.

### CONSTRUCTION

The sensor element has a 4 electrode design for higher accuracy. The electrodes are internal for use in smaller pipes and for lower conductivity ranges. The sensor element has an accurate temperature sensor with low response time for fast temperature compensation. Our many years in instrument design guarantees a rugged design, but still allows the possibility to solve customers' special requirements. A selection of electrode and sensors element materials is available to suit the specific application.

### FEATURES

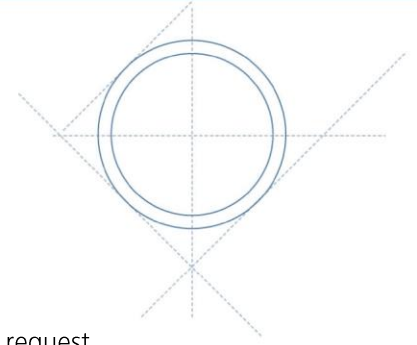
Easy to install | Applicable for high temperature and pressure | Rugged design | Wide selection of materials and mounting options | Resistant to scaling.



CONSTRUCTION AND DESIGN OF INSTRUMENTS FOR FLOW, LEVEL AND TEMPERATURE

## TECHNICAL SPECIFICATION

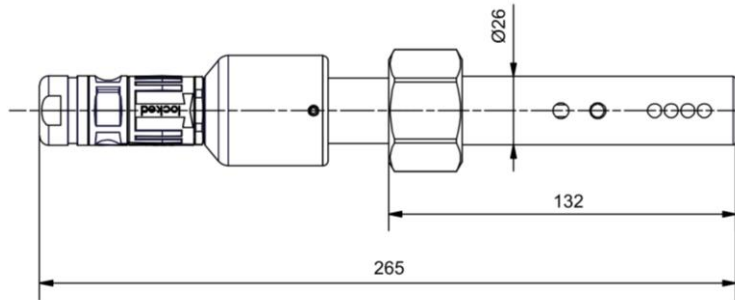
- Measuring range : 200 nS/cm to 1000 mS/cm
- Material. electrodes : Stainless steel AISI 316, other materials on request
- Material. sensor body : Stainless steel AISI 316, 22 Cr duplex, 25 Cr duplex, Hastelloy C-276, Monel, Titanium and other materials on request
- Material.  
Electrode holder : PTFE
- Process connection : 1 ¼" internal thread BSP or NPT, 1" external thread BSP or NPT
- Installation lengths : 120 mm (standard), 350 to 3500 mm see coding for selection
- Pressure : Max 30 bar-g, higher pressure on request
- Temperature : Max 200°C,
- Temperature element : Pt1000 Class A
- Cell constant : individually determined, value is marked on sensor body
- Uncertainty : 1 % per decade
- Protection class : IP 65
- Electrical connection : 9 pole connector



## QUALITY ASSURANCE

ISO 9001 : 2008 certified, PED Module H

## OVERALL DIMENSIONS



Dimensions in mm

## SENSOR CODING

- |                       |      |     |
|-----------------------|------|-----|
| 1. Type 611           |      |     |
| 2. Mounting           |      |     |
| 1 ¼" BSP int.         | code | 3B  |
| 1 ¼" NPT int.         | code | 3N  |
| 1" BSP ext.           | code | 2B  |
| 1" NPT ext.           | code | 2N  |
| 3. Electrode type     |      |     |
| Internal              | code | 1   |
| 4. Electrode material |      |     |
| Stainless steel 316   | code | 316 |
| Other, please specify |      |     |
| 5. Sensor body        |      |     |
| 316/PTFE              | code | 3P  |
| Other, please specify |      |     |
| 6. Length, insertion  |      |     |
| 132 mm                | code | 013 |
| 350 mm                | code | 035 |
| 500 mm                | code | 050 |
| 1000 mm               | code | 100 |
| 1500 mm               | code | 150 |

### Example

Conductivity sensor with 1 ¼" BSP internal thread, internal electrodes in stainless steel 316, sensor body in AISI 316 and PTFE and installation length 132 mm has following code:

**611-3B-1-316-3P-013**