

EMCO Conductivity Sensors with Internal Electrodes series 711 for Concentration Measurement

APPLICATIONS

The EMCO conductivity sensor is designed to be used with an appropriate analyzer to measure concentration of common acids, such as: Sulphuric Acid, Nitric Acid, Hydrochloric Acid, Sulphur Tri-Oxide (Oleum), Hydrofluoric Acid.

INDUSTRIES

Petro-Chemical, Metal refining, Sulphuric Acid Processing, Pulp & Paper, Chemical, Steel Processing, Fertilizer industries, and other corrosive liquid handling industries.

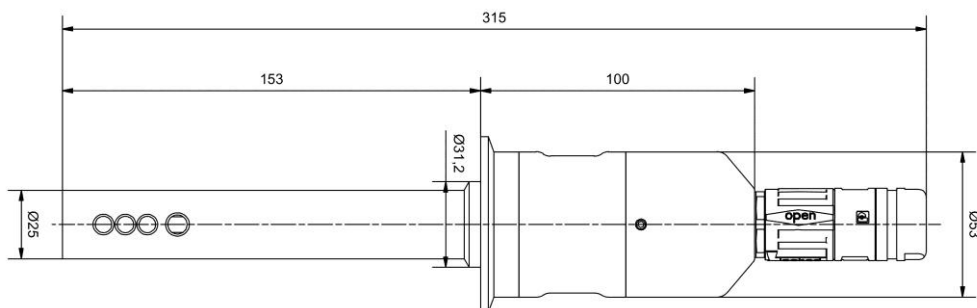
CONSTRUCTION

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 has an accurate temperature element. 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 sensor element materials are available to suit the specific application.

FEATURES

Easy to install | Applicable for very corrosive fluids | Rugged design | Cable mounting via connector | Resistant to scaling.

OVERALL DIMENSIONS



Dimensions in mm





TECHNICAL SPECIFICATION

Measuring range	: 0- 1500 mS/cm	Pressure	: Max 10 bar
Material. electrodes	: Tantalum or Platinum	Temperature	: Max. 150°C
Material. sensor body	: PTFE	Temperature element	: Pt1000 Class A IEC 751
Material, electrode holder	: PTFE	Cell constant	: Individually determined
Material. sensor housing	: Stainless steel AISI 316	Accuracy	: 1 % per decade
Process connection	: sandwich or clamp connection	Protection class	: IP 65
Insertion length	: 153 mm	Electrical connection	: 9 pin connector
Special cables with following lengths	: 3 meter, 5 meter, 10 meter, 20 meter, 30 meter		

ACCESSORIES

Transition flanges (between sensor and counter flange).
 Lab joint flanges
 Straight and angled flow chambers in materials compatible with the fluid.

QUALITY ASSURANCE

ISO 9001 : 2008 certified, PED Module H

SENSOR CODING

1. Type 711			
2. Mounting			
Transition flange.	code	TF	
1 ½" ANSI flange mount.	code	VS	
3. Electrode type			
Internal	code	1	
4. Electrode material			
Tantalum	code	TAN	
Platinum	code	PLA	
5. Sensor body			
PTFE	code	OP	
Other, please specify			
6. Length, insertion			
150 mm	code	015	
7. Cable length			
3 meter	code	03	
5 meter	code	05	
10 meter	code	10	
20 meter	code	20	
30 meter	code	30	

Example

Conductivity sensor with clamp, internal electrodes in tantalum, sensor body in PTFE, insertion length 153 mm and 5 meter cable has following code:

711-TF-1-TAN-OP-015-05

Accessories

Transition flange, wetted parts : PTFE	
Size	Type
DN 25, DN 32, 1½"	711-TRA-2532
DN 40, DN 50, 2"	711-TRA-4050

Connection flange	
DN 25	711-COF-25
DN 32	711-COF-32
DN 40	711-COF-40
DN 50	711-COF-50

Lap joint flange	
1½"	711-VST-40