

CONDUCTIVITY MEASURING CELLS

Controllers

Sensors

Analysers

Samplers

Flow

Level

Pressure

Web remote control

Data logging

Accessories



S411
S411 C

S411 TEF
S411 TEF C

S411 U
S411 P

S411 4E

AD SERIES DIGITIZER to convert the conductivity measurement into serial signal with standard MODBUS RTU protocol

General features

Wide range of conductive cells designed both for water treatment and for industrial applications.

Thanks to the combination between the cell constant (k) and the construction materials it is possible to cover a wide spectrum of applications with different measurement ranges.

Applications

Untreated water, drinking water, ultra pure water, demineralization, reverse osmosis, ion exchanger, water from conditioning systems and boilers, process water.

Technical specifications

Models	S411	S411 C	S411 TEF	S411 TEF C
Constant	1	1	1	1
Measuring range	0...50.000 μ S	0...50.000 μ S	0...10.000 μ S	0...10.000 μ S
Temp. compensation	-	yes	-	yes
Operating temperature	5...100 °C	5...100 °C	0...100 °C	0...100 °C
Maximum pressure	5 bar	5 bar	2 bar	4 bar
Body material	PP	PP	PTFE	PTFE
Electrode material	Graphite	Graphite	SS316	SS316
Connector	Integral cable			
Connection to process	1/2" GAS	1/2" GAS	1" GAS	1" GAS
Standard cable	5 mt	5 mt	5 mt	5 mt

Technical specifications

Models	S411 U	S411 P	S411 4E		
Constant	1	10	10	100	0.7
Measuring range	0...50.000 μ S	10...200 mS	0...1000 μ S	0.04...20 μ S	0...500 mS
Temp. compensation	yes	yes	yes	yes	yes
Operating temperature	0...120 °C	0...120 °C	0...130 °C	0...130 °C	0...100 °C
Maximum pressure	6 bar	6 bar	16 bar	16 bar	4 bar
Body material	PES	PES	SS316	SS316	Polycarbonate
Electrode material	Graphite	Graphite	SS316	SS316	Platinum on ceramic base
Connector	with connector				
Connection to process	1/2" GAS ^(*)	1/2" GAS ^(*)	1/2" NPT ^(*)	1/2" NPT ^(*)	Pg 13.5
Cable	5 mt (other on request)				
Applications	Industrial at middle range	Industrial at high range	Industrial at low range	Industrial at very low range	Industrial for wide range

(*) ON REQUEST CLAMP CONNECTIONS, FOOD GRADE FLANGES, DIN

INDUCTIVE CONDUCTIVITY MEASURING CELLS

General features

The conductivity measuring system using inductive sensors has many advantages over other conventional methods. The absence of electrodes in contact with the fluid to be measured makes the system recalibration and maintenance virtually useless over long periods of time. The **S411-IND** sensors have a great tolerance with respect to the coating phenomena, probably the most common problem encountered when measuring with conventional electrodes.



S411 IND

The inductive sensor has been engineered to produce a low cost sensor, without sacrificing performance or quality. The result has been obtained by moulding the sensor using polypropylene reinforced with fibreglass. The sensor provides all of the benefits that the method of inductive conductivity measurement provides.

Applications

Polluted surface waters, process monitoring, means very contaminated or aggressive, influential water of treatment plants and wastewater.

Models

S411 IND
sensor only

S411 IND T
for immersion

S411 IND E
for insertion with T-fitting

S411 IND T INS
for direct insertion on flat wall

Digitizer for inductive measuring cells

The AD Series Chemitec digitizers convert the conductivity measurement into serial signal with standard Modbus RTU protocol

Technical specifications S411-IND

Sensore	
Operating temperature	- 5...60 °C (not freezing)
Measuring range	1000 uS...1000 mS
Temp. compensation	Temperature sensor Pt1000 with 2 wires
Cable	Standard 5 meters
Operating pressure	Vacuum to 6.5 bar (100 psi)
Mechanical construction	
Material	PVC with Viton® seals
Contact materials	Glass-reinforced polypropylene
Immersion length	600 or 1200 mm
Mounting	Standard bracket or optional flange
Connection	0.5" BSP male
Protection grade	IP68

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S411 IND HT

These sensors are manufactured of PEEK™, a food grade material with excellent aggressive chemical resistance and high temperature performance. The construction allows the sensors to operate at 100 °C continuously, withstanding thermal shocks commonly associated with CIP applications. The sensors can be sterilized at up to 135 °C.

Applications

Ideal for food and process applications
Conductivity and concentration measurements
Wide range of process connections

Models

S411 IND HT
for insertion

S411 IND HT 60/120
for immersion

S411 IND HT TP
for By-pass with PVC T-fitting

S411 IND HT TS
for By-pass with SS T-fitting

Digitizer for inductive measuring cells

The AD Series Chemitec digitizers convert the conductivity measurement into serial signal with standard Modbus RTU protocol.

Technical specifications S411IND-HT

Sensore

Operating temperature	- 5...100 °C / up to 135 °C for short periods (CIP process)
Measuring range	1000 uS...1000 mS
Temp. compensation	Temperature sensor Pt1000 with 2 wires
Cable	Disconnectable Standard 5 meters
Operating pressure	Vacuum to 10 bar (150 psi)

Mechanical construction

Materials	PEEK / AISI
Contact materials	Body PEEK – Temperature sensor INOX (PEEK on request)
Immersion length	600 or 1200 mm
Mounting	Standard bracket or optional flange
Connections	RJT 2", 2.5", 3" – Tri clamp 2", 3" – IDF/ISS 2", 2.5", 3" DIN 1185: 50mm, 80mm (oher on request)
Protection grade	IP67