

- **Safe operation and high process resistance**
 - 316L stainless steel body and PEEK insulator
 - operates to 20 bar (290 psi) and 110°C (230°F)
- **Easy installation and operation**
 - insertion and flow-through
- **Problem-free cable connection**
 - plug-in connector eliminates incorrect connection and tangled cables
 - terminal head version for on-site adjustment of cable length
- **Excellent for rapid changing processes**
 - fast integral temperature sensor
 - T_{90} under 30 seconds
- **Reduced maintenance**
 - easy to clean, removable electrode sheath
- **Wide range of applications**
 - power plants
 - water treatment
 - de-mineralization
 - semiconductors
 - pulp & paper



Rugged sensors, rapid response

Safe operation and high process resistance

The AC200 series of cells provide highly accurate and reliable in-line conductivity measurements up to 20 bar (290 psi) and 110°C (230°F). Typical applications are power plants, ion-exchangers, reverse osmosis and chip cleaning.

The cells feature dedicated screw-in sensors that can be inserted directly in-line or screwed into a flow-chamber.

A range of cell constants (k values) is provided to measure a wide range of process media from 1000 $\mu\text{S}/\text{cm}$ down to 0.055 $\mu\text{S}/\text{cm}$ (or 18.2 M .cm).

All AC200 cells are manufactured to highly exacting standards. Traceable certificates of cell constant accuracy can be supplied on request.

Simple Maintenance Easy-to-Clean Cells

Some ultra-pure water processes can contain contaminants that periodically could coat electrodes and reduce measurement accuracy. This can occur during commissioning of new plant or with on-demand power plant where the process does not run continually.

To make maintenance easier all AC220 cells have a removable outer sheath making access for cleaning very simple.

Flexibility of Cable Connection

A choice of sensor cable interconnection methods is provided in order to suit a wide variety of needs. The detachable cable connector ensures easy installation and eliminates the possibility of making a wrong connection or tangling cables.

For user flexibility, a terminal head version enables on-site adjustment of cable length and cell stocking, while direct fixed integral cable mounting is provided for the simplest, problem-free connection.

Rapid Integral Temperature Sensor

Temperature compensation is critical for conductivity measurement, particularly where a wide variation of temperatures is expected.

In addition, detection of cooling water failure can be critical on high temperature sampled systems in the modern power plant.

All AC220 stainless steel cells are equipped with a very fast temperature compensator with T_{90} of under 30s. This enables accurate temperature compensation and use as a separate temperature measurement for output from the analyzer.



Detachable Connector for Easy Installation

Specification

AC220 Stainless Steel Cells

Wetted parts

Electrodes and cell body	316L Stainless steel
Insulator	PEEK

Temperature and pressure limits

Max. operating temperature	110°C (230°F)
Max. operating pressure (absolute)	20 bar (2000kpa, 290 psi)

Ingress protection

IP68

Cell constants

0.01 and 0.10

Temperature element

Integral Pt100 (3-wire) in sensor body

Temperature response, T_{90}

< 30s

Sensor cable terminations

- Integral, potted-in cable
- Terminal head
- Detachable cable (IP66 connector)

Available cable lengths

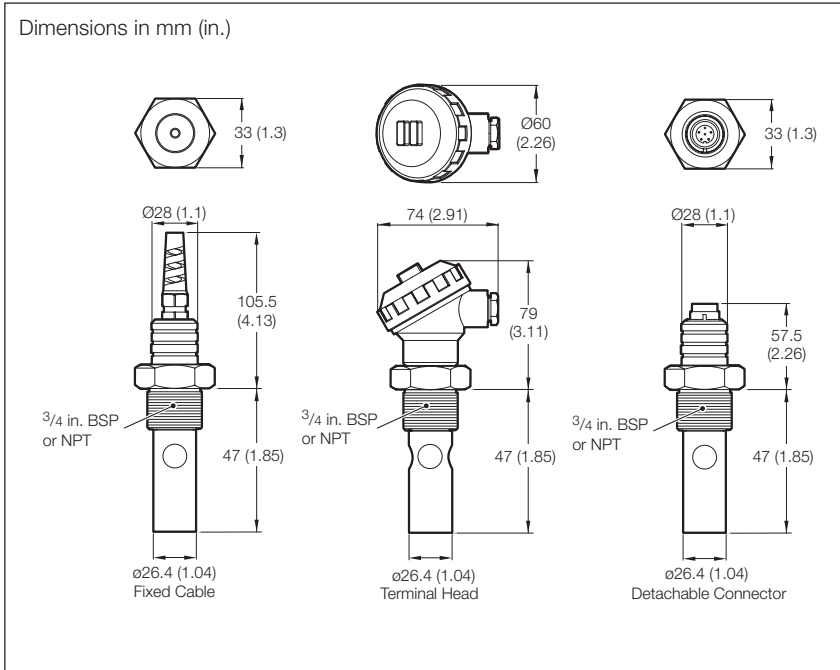
1m (3.3 ft), 2m (6.6 ft), 5m (16 ft), 10m (33 ft), 15m (49 ft), 20m (66 ft) – other lengths on request

Process connections

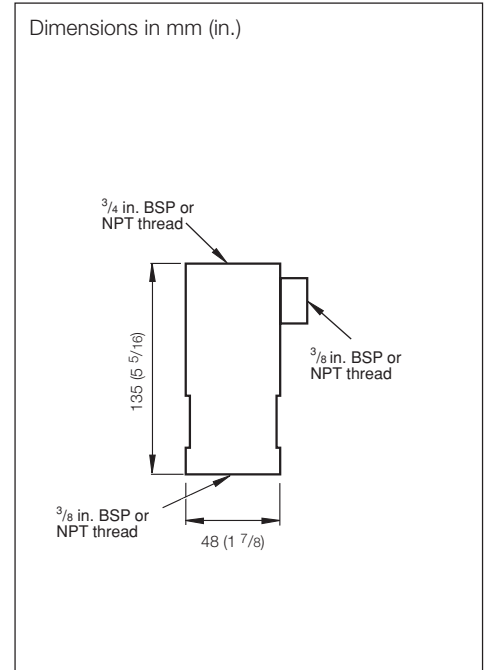
Screw-in insertion

- G^{3/4} in. (BSP parallel) thread
- ^{3/4} in. NPT thread

Overall Dimensions



AC220 Cells



2998 Flow Chamber

Ordering Information

AC220 Series

AC220 Series 2-Electrode Stainless Steel Cells	AC221	/X	X	X	X	X	X
Insertion Cell							
G 3/4 in. (BSP parallel) thread		/1					
3/4 in. NPT thread		/2					
Cell Constant							
0.01						1	
0.10						3	
Temperature Compensator							
Pt100						1	
Cable Connection Method							
Fixed cable						1	
Terminal head						2	
Detachable connector						3	
Cable Length							
None							0
1m (3.3 ft)							1
2m (6.6 ft)							2
5m (16 ft)							3
10m (33 ft)							4
15m (49 ft)							5
20m (66 ft)							6
Other lengths – consult factory							9
Language (Manual)							
English							1

...Ordering Information

AC200 Replacement/Extension Cables

AC200 Replacement/Extension Cables	AC200	XXX	X
Cell Extension Cable			
For Terminal Head versions AC2xx/xxx2		018	
For Detachable Connector versions AC2xx/xxx3		008	
Cable Length			
None			0
1m (3.3 ft)			1
2m (6.6 ft)			2
5m (16 ft)			3
10m (33 ft)			4
15m (49 ft)			5
20m (66 ft)			6
Other length – consult factory			9

2998 Series Flow Chambers

	Cell Connection	Inlet/Outlet Connection
2998/350	3/4 in. BSP	3/8 in. NPT
2998/360	3/4 in. BSP	3/8 in. BSP
2998/370	3/4 in. NPT	3/8 in. NPT

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