

Industrial pH Sensors

– from the Purest to the Harshest Industrial Applications

Your Business – Our Solutions



Water & Industrial analysis

Analyze^{IT} Industrial^{IT}

ABB

Positive Solutions that put your Requirements First

ABB provides a range of process, laboratory and industrial systems and electrodes for the measurement of pH/Redox (ORP). Utilizing patented sensor technologies, they consistently outperform other manufacturers' sensors, in even the most challenging process conditions – including high temperatures and pressures, pure water and the most contaminated liquids. All versions are available in flow, dip and insertion models. ABB designs, develops and manufactures all the elements that constitute a pH system – including the glass membrane technology.



Power and Steam-raising

In power associated applications across the world, ABB pH sensors and systems are providing long term, reliable, accurate measurements and making a positive contribution to plant productivity and bottom line profitability.

7660 Flowing Reference System

With its stainless steel flow chamber, the 7660 is manufactured specifically for high purity waters. The reservoir fed reference electrode gives high stability and reproducible, accurate measurements as well as continuity and a longer operating life.

AP100 Cartridge Sensor

A rugged, versatile, disposable all-in-one sensor, the AP100 is suitable for many applications in steam raising plants.

TB(X)5 Solid-Matrix Sensor

The self-cleaning properties of TB(X)5 make it the ideal sensor for Flue Gas De-sulphurization applications.



Municipal/Industrial Water

ABB has unrivalled expertise across the entire water cycle. Our pH sensors and systems are providing accurate, reproducible measurements across the world, helping ensure effluent compliance and reducing the use of costly reagents.

AP100 Cartridge Sensor

The AP100 is a versatile, all-in-one, disposable sensor suitable for a range of applications from raw water intake to potable water. Ideal for remote site operation, flow, dip and insertion versions are available.

AP200 Solid Polymer System

Its self-cleaning, on-line diagnostic functions ensure long-term measurement stability and minimal maintenance. An economic solution, it offers a low lifetime cost of ownership compared to other electrodes.

AP300 Gel-filled Sensor

Ideal for OEMs and general industrial processes, it is easy to customize or incorporate into flow, dip and retractable systems.



Process Industries

In processes as diverse as chemicals, pulp and paper and pharmaceuticals, ABB pH sensors and systems are increasing yields, minimizing re-work, maintaining quality and optimizing efficiency.

AP200 Solid Polymer System

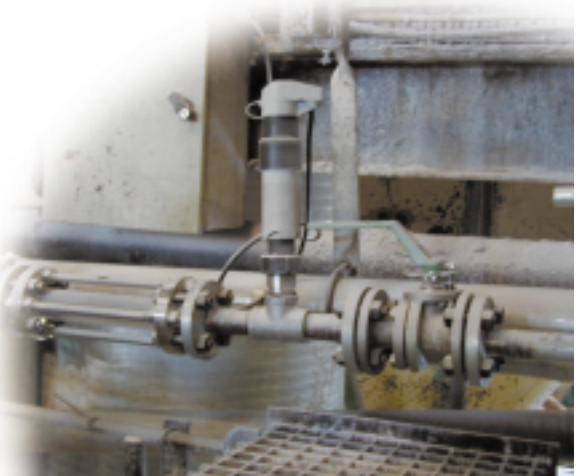
Proven to provide high stability, reproducible measurements in difficult and harsh process applications.

TB(X)5 Solid-Matrix Sensor

The TB(X)5 is widely accepted as the world's leading technology for the measurement of pH in the most demanding and arduous conditions.

AP300 Gel-filled Sensor

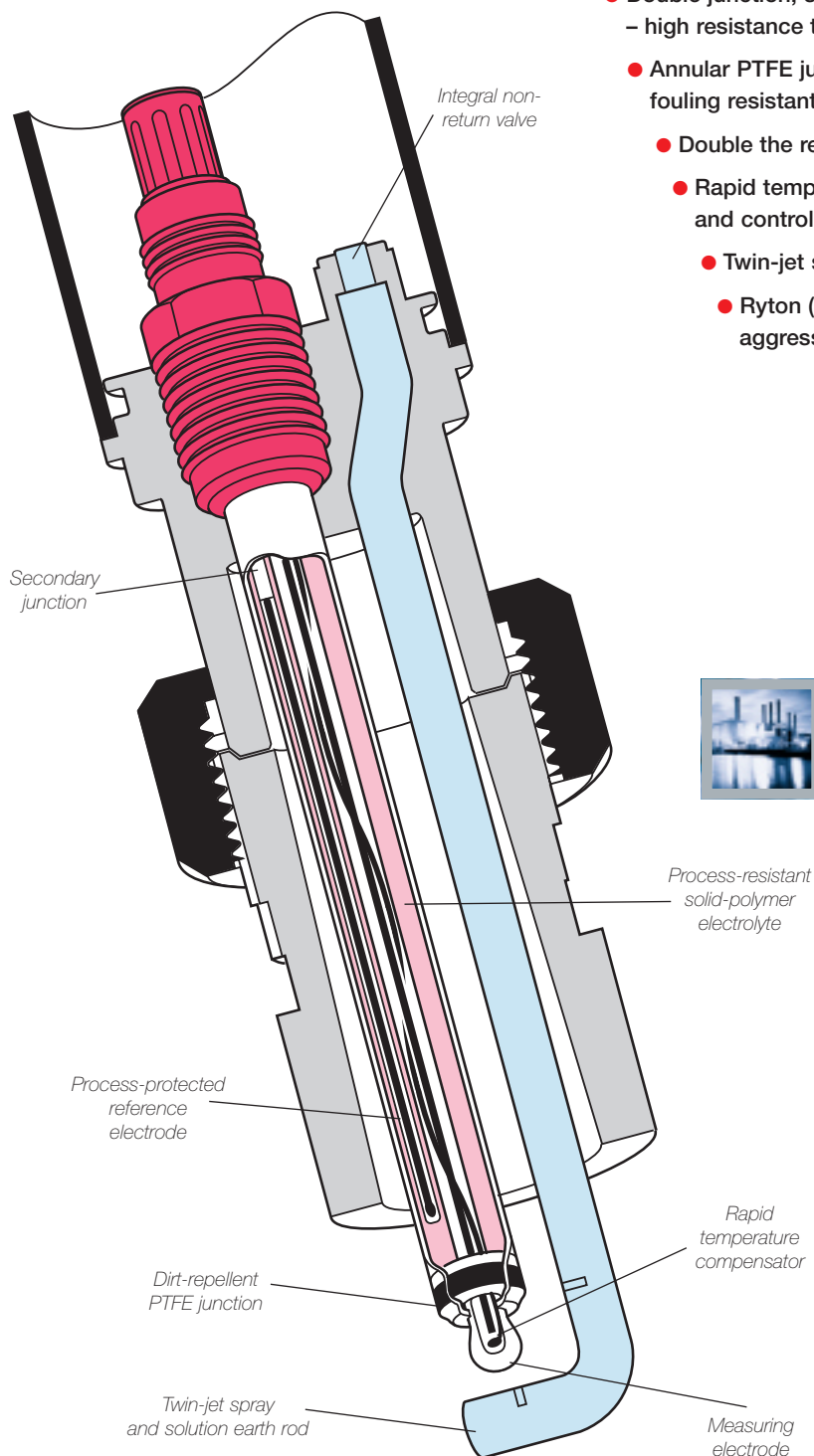
A composite, plastic combination sensor system with integral temperature compensation that provides an economical alternative to complex systems.



Choice without Compromise

AP200 System with AP120 Solid Polymer Sensor

AP200 Sensor



- Double junction, solid gel reference electrode
 - high resistance to poisoning and pressure-cycling
- Annular PTFE junction – minimizes streaming potential, fouling resistant
- Double the reference path length – double the life
- Rapid temperature measurement assures accurate calibration and control
 - Twin-jet spray cleaning keeps sensor in optimum condition
 - Ryton (PPS) wetted parts – provide high chemical resistance for aggressive applications up to 130°C and 6 bar

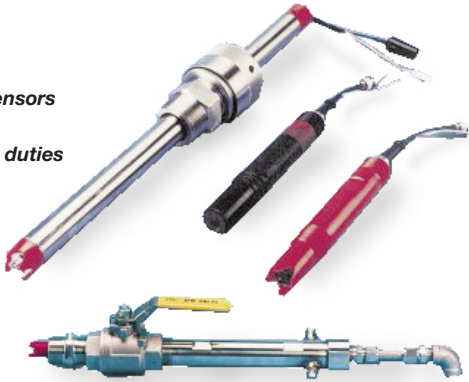


AP200 Sensor essential in chemical processes

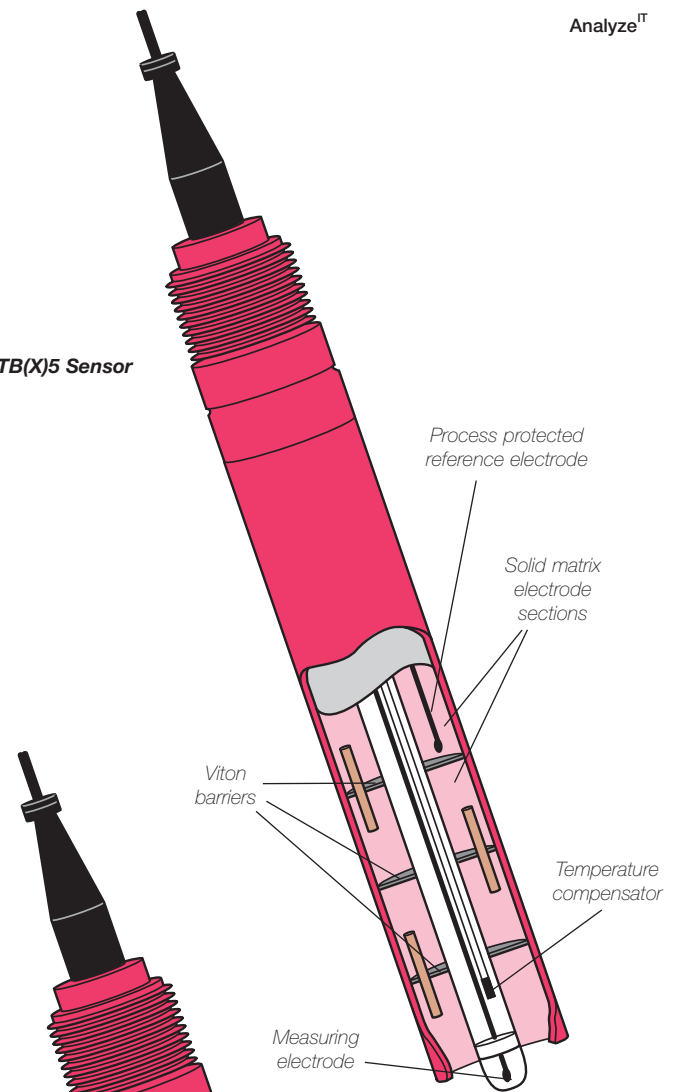
TB(X)5 Solid-matrix Sensor

- Solid state reference section – maximum resistance to poisoning and pumping (pressure)
- Flat glass and flush junction – high resistance to coating (plugging)
- Suitable to 140°C and 20 bar – high process resistance
- Integral earth/ground rod – enables sensor self-checking
- Cellular matrix – for operation in the most demanding environments
- Wetted parts available in PVDF, PPS, stainless steel, hastelloy and titanium

TB(X)5 Sensors for heavy industrial duties



TB(X)5 Sensor



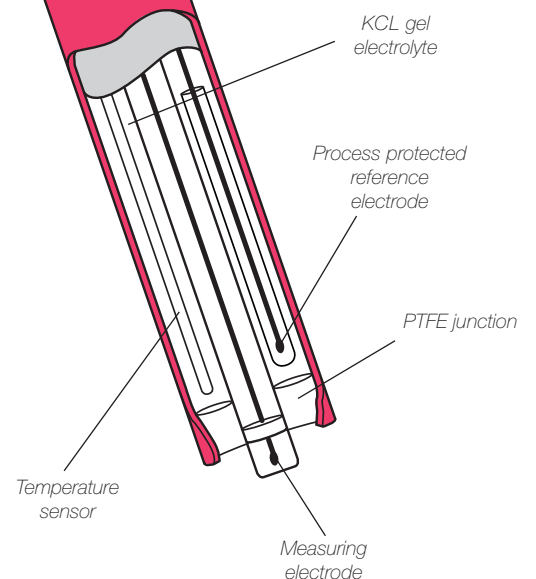
AP300 Gel-filled Sensor

- Ideal for general industrial applications
- User-customizable for insertion, flow, dip and retractable
- Integral temperature compensator
- High stability PTFE liquid junction
- Gel-filled disposable sensor
- Wetted parts available in PPS, PVDF and stainless steel

AP300 Sensors ideal for industrial applications

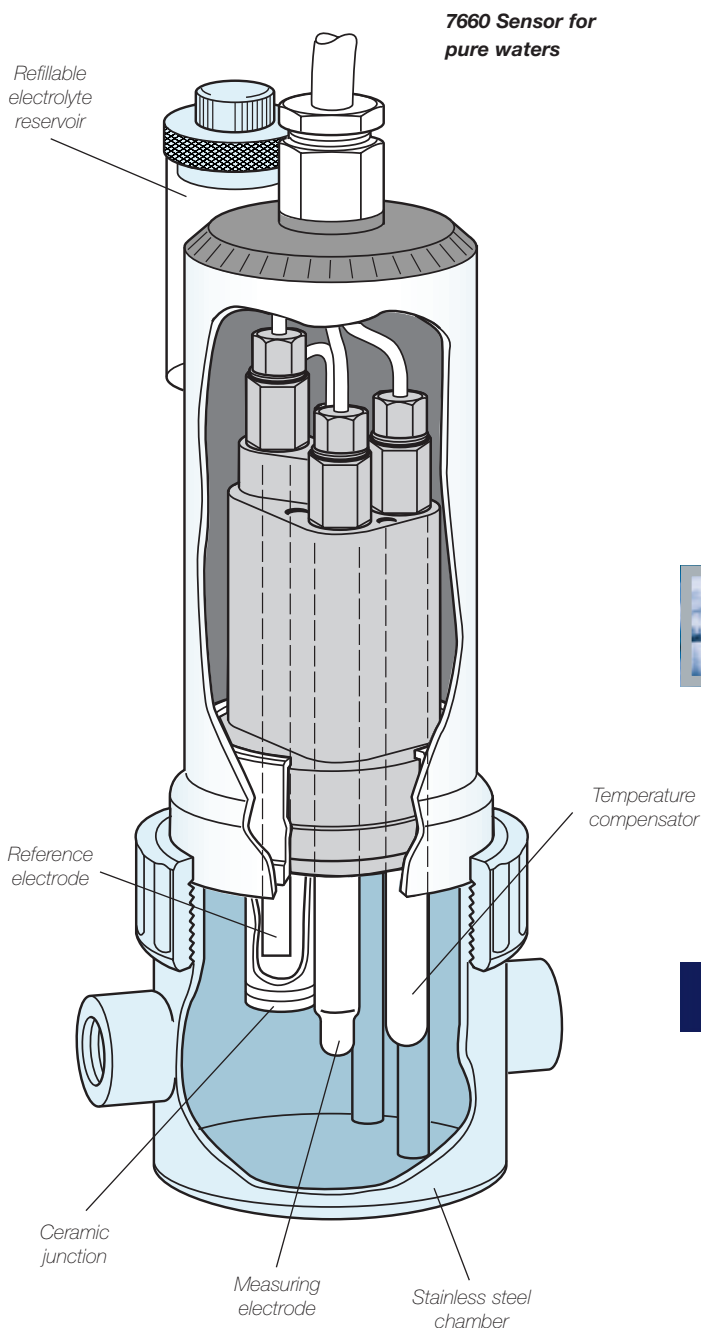


AP300 Sensor



7660 Flowing Reference System

- Reservoir-fed reference electrode – high stability and accuracy, reproducible measurement
- Replacement liquid junction – eliminates drift and maximizes sensor life
- Stainless steel flow chamber – recommended for low conductivity waters
- Detachable cables – saves time, easy to install
- Colour coded sockets and plugs – for ease of installation



Cartridge Sensor AP100

- Modular construction – serviceable sensor
- Detachable cables – saves time, easy to install
- Colour coded sockets and plugs – for ease of installation
- Replaceable PTFE reference junction – maximizes sensor life
- KCl electrolyte – refillable for longer life
- Bayonet snap fit – easy removal
- Integral Pt 100 temperature compensator

Analyzers/Transmitters

The ABB family of electronic transmitters provides all the flexibility and mounting configurations needed for any application and environment.

Each package can be used with any of ABB's outstanding range of pH sensors and can be 4-wire AC or 2-wire DC loop-powered.

ABB offers a comprehensive range of 4 wire and 2 wire transmitters to complement the formidable array of sensors and systems.

Together they combine to provide solutions to virtually any pH application. Mains and loop-powered versions are available for safe and hazardous area applications offering a host of advanced features.



AX46x Single and Dual Input Analyzers

- IP66/NEMA4X ingress protection
- World's smallest panel mount footprint
- 1 or 2-input pH/Redox (ORP)/conductivity in one instrument
- Easy access terminations and reduced panel space
- 3 alarms and 2 current outputs supplied as standard
- Add-on option card provides up to 5 alarm relays and 4 current outputs
- Advanced instrument and sensor diagnostics enable just-in-time maintenance
- Integrated sensor cleaning function provides in-line unattended maintenance facility
- Integral P, PI, PID, pH controller saves capital outlay*
- Versatile power supply options 85V to 265V AC and 24V DC
- Non-Ex and FM/CSA/CENELEC ATEX** hazardous area approved devices
- Analog and Profibus DP communications capabilities**

TB8xPH 2- and 4-wire Analyzers

- IP66/NEMA4X ingress protection
- Easy to read backlit LC displays with SMART-keys guide users to the right choices
- Non-Ex and FM/CSA/CENELEC ATEX** hazardous area approved devices suitable for all major industries
- Advanced instrument and sensor diagnostics enable just-in-time maintenance
- Patented ground loop detection
- 3 alarms and 2 current outputs supplied as standard in AC version
- Integrated sensor cleaning function provides in-line unattended maintenance facility in AC version
- Analog, HART, Profibus PA** and Fieldbus Foundation communications capabilities



* Single-input units only

** Check ABB for availability

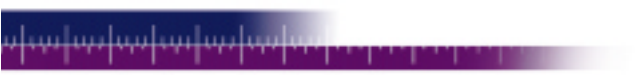


ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impacts. The ABB Group of companies operates in more than 100 countries and employs about 135,000 people worldwide.

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ABB Limited
Oldends Lane, Stonehouse
Gloucestershire GL10 3TA
UK
Tel: +44 (0) 870 600 6122
Fax: +44 (0) 1453 821 478

ABB Inc
2175 Lockheed Way
Carson City NV 89706
USA
Tel: +1 775 883 4366
Fax: +1 775 883 4373