

LECOL

PH & ORP SENSORS

ION BARRIER

- DESIGNED FOR HARSH ENVIRONMENT
 - INHIBITS CHEMICAL ATTACK
 - ENHANCES REFERENCE STABILITY AND ACCURACY
 - EXTENDS SENSOR LIFESPAN
 - IMPROVES RESISTANCE TO CONTAMINATION
-

HYDRIONIS

- DESIGNED FOR PURE AND ULTRAPURE WATER WITH LOW CONDUCTIVITY
- EXTENDED SENSOR LIFE WITH REDUCED MAINTENANCE IN HIGH-PURITY ENVIRONMENTS
- DELIVERS STABLE AND DRIFT-FREE PH READINGS

LECOL PH & ORP SENSORS ARE ENGINEERED FOR THE TOUGHEST ENVIRONMENTS — FROM HARSH CHEMICAL PROCESSES TO ULTRAPURE WATER SYSTEMS. FEATURING PATENTED REFERENCE TECHNOLOGY, THEY DELIVER UNMATCHED STABILITY AND EXTENDED LIFESPAN. DESIGNED FOR CRITICAL APPLICATIONS IN REFINERIES, CHEMICAL PLANTS, PULP AND PAPER, SEMICONDUCTORS, AND POWER GENERATION, LECOL SENSORS CONSISTENTLY OUTPERFORM CONVENTIONAL LIQUID- OR GEL-FILLED DESIGNS IN BOTH DURABILITY AND RELIABILITY.



LECOL's pH sensors are engineered to excel in demanding industrial and ultrapure water measurements. Sensors in these applications frequently experience reference cell failure due to chemical attack, clogging, or loss of electrolyte. Pure water presents an added challenge with its low conductivity, causing unstable and delayed pH readings. To solve these issues, LECOL developed two innovations: the ION BARRIER, a solid-state reference that blocks chemical intrusion and extends sensor lifespan; and Hydrionis™, a high-stability reference system designed to maintain consistent ion activity, enabling precise pH measurement even in low-conductivity environments. Together, these technologies ensure fast response, long-term stability, and reliable performance across all conditions.

- **Engineered Glass Solutions for Harsh and High-Purity Environments**

LECOL offers specialised electrode glass formulations tailored to meet the demands of a wide range of applications, including high-temperature processes (up to 140°C), coating-prone media, hydrofluoric acid, and ultrapure water. Both hemispherical and flat glass options are available, and select models include built-in temperature sensors for fast and accurate temperature compensation.

- **Broad System Integration**

LECOL sensors are designed for seamless compatibility with major pH/ORP analysers and industry-standard signal protocols. Whether for new installations or system retrofits, our sensors ensure quick integration, stable communication, and reliable performance across a wide range of control platforms and instrumentation brands.

- **Advanced Junction Solutions for Process Reliability**

LECOL sensors feature a large-area liquid junction to enhance stability and reduce clogging—ideal for viscous or particle-rich samples. For harsher applications, we offer an optional wood-based junction, which provides natural resistance to hydrocarbon fouling while supporting stable ion exchange, extending sensor life and performance in aggressive or oily environments.

- **Flexible Mounting Solutions for Every Process**

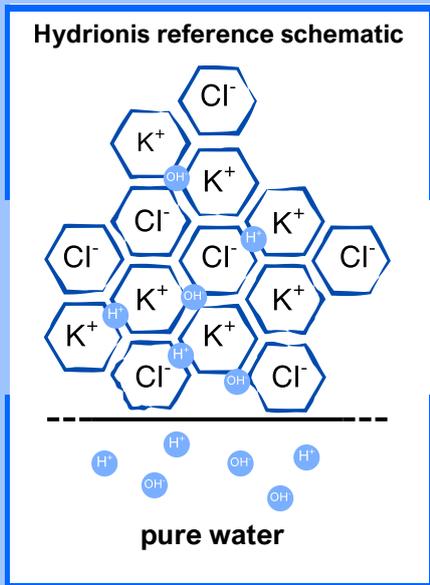
Offer multiple mounting options to suit various industrial setups, including inline, immersion, and hot-tap configurations. Whether for pressurised pipelines or open tanks, LECOL sensors are engineered for flexibility, safe maintenance, and continuous operation—ensuring reliable measurement and easy integration into both new systems and retrofit applications.

- **Resilient Sealing Options**

To meet the needs of challenging applications, LECOL provides Viton™ and FFKM O-rings. These elastomers deliver superior performance against heat, solvents, and aggressive media, maintaining sensor integrity in critical processes.



“HYDRIONIS” NON-FLOW REFERENCE ELECTRODE



The LECOL B64 pH electrode features a patented “Hydrionis” non-flow reference system, providing superior reliability, stability, and minimal drift compared to standard pure water pH electrodes using gel or liquid KCl references.

Traditional gel or liquid KCl references can become unstable in pure or ultrapure water due to fluctuations in sample flow rate and pressure. These variations cause inconsistent electrolyte concentrations, unstable reference potentials, and unreliable pH readings.

The B64’s non-flow reference overcomes these issues by maintaining a fixed internal KCl concentration and preventing KCl leakage. Its design allows ultrapure water to enter the electrode for ion exchange, forming a stable conductive pathway unaffected by flow or pressure changes.

This advanced design ensures consistent and stable reference potential, making the LECOL B64 the ideal choice for accurate and reliable pH measurements in pure and ultrapure water applications.

UNITED STATE PATENT CERTIFICATE NO. : US 11860117 B2
 TAIWAN PATENT CERTIFICATE NO. : M628015
 CHINA PATENT CERTIFICATE NO. : ZL 202122720763.1

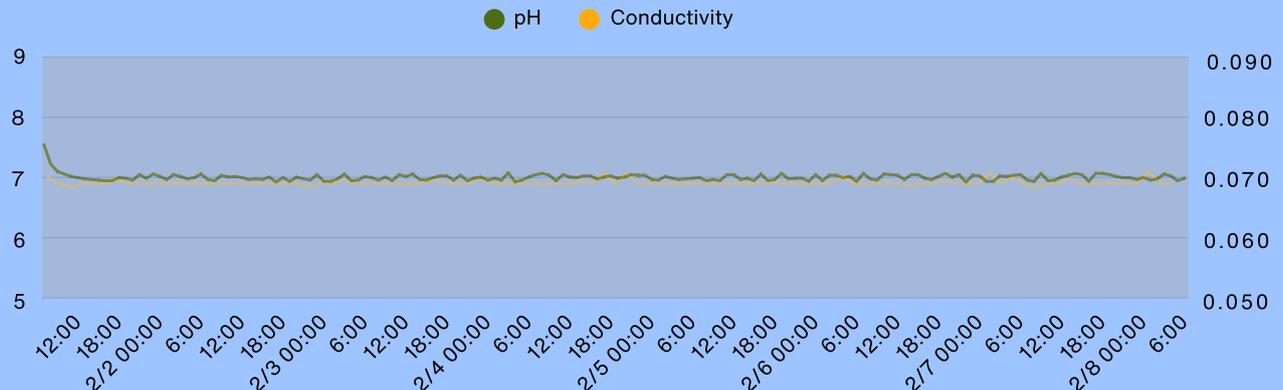
APPLICATIONS

- ULTRAPURE WATER
 - STEAM CONDENSATE
 - CONDENSATION SAMPLE
 - WATER FOR INJECTION
 - DISTILLED WATER
 - DEMINERALIZED WATER
- LOW CONDUCTIVITY SAMPLING
 - GAS/COAL POWER PLANT
 - STEAM APPLICATION
 - DEIONIZED WATER
 - REVERSE OSMOSIS

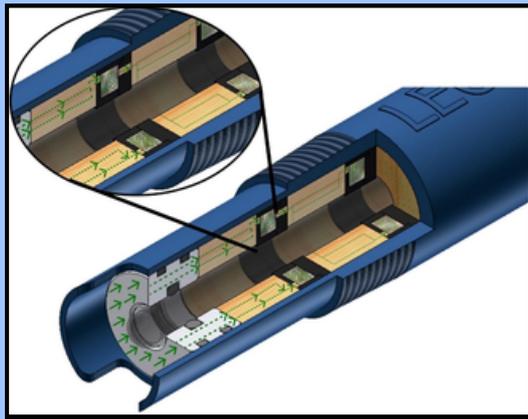
LECOL B64 pH sensor	competitor
Utilising a patented non-flow reference	Utilising liquid or gel reference
Less electrolyte consumption Less reference electrodes poisoned longer span life	Shortened lifespan soon reference electrode poisoned short span life
NO refill electrolyte requirement	Refill electrolyte requirement
NO replacement liquid junction requirement	Replacement liquid junction requirement
Less frequent calibration	Frequent calibration required
No affect by sample pressure	Easily affected by sample pressure
Less affect by sample flow-rate	Easily affected by sample flow-rate
Easy install and less space required	Requires more space to install

REAL-TIME PURE WATER PH MONITORING SNAPSHOT – STABILITY AND SIGNAL CHECK

This real-time monitoring screenshot showcases the performance of LECOL sensors in a high-purity water application. The display presents data from two channels. Channel shows a conductivity value of 0.069 $\mu\text{S}/\text{cm}$, confirming low-conductivity typical of ultrapure or deionised water, which often presents challenges for accurate pH measurement. Channel displays a stable pH reading of 7.00, indicating that the sensor is performing reliably and maintaining accurate calibration despite the difficult conditions. The graph’s trend line reveals an initial stabilisation period, followed by consistently accurate pH readings over time. This demonstrates the sensor’s capability to adapt quickly and maintain measurement integrity in environments with low ionic strength. Such data is crucial for performance verification, calibration validation, and operational diagnostics in applications like ultrapure water production, power plant condensate monitoring, or semiconductor-grade water control.



“ION BARRIER” SOLID STATE REFERENCE ELECTRODE



The LECOL B65 pH/ORP sensor is an advanced industrial-grade electrode designed to address the common challenges found in harsh process environments. Central to its performance is LECOL's patented reference design known as the ION BARRIER, a breakthrough in reference electrode technology that offers superior stability, accuracy, and longevity compared to traditional solid-state systems.

In over 90% of pH sensor failures, the root cause lies in the deterioration of the reference cell. Common failure modes include chemical attack by aggressive process fluids, clogging of the junction by particulates, and contamination of the internal electrolyte. These failures often result in erratic pH readings, frequent maintenance, and premature sensor replacement. The B65 sensor tackles these issues directly with a multi-layered protection approach built into its reference architecture.

The image simulates internal flow path of the B65 is strategically designed to layer these defences. After the sample enters through the liquid junction, it encounters the wood-cell filter, which uses natural fibers to trap larger contaminants with the cellular structure. The sample then travels into the ION BARRIER, which forms a complex matrix of randomised ionic pathways that further restrict the passage of harmful ions and neutralise chemical attack. This multi-stage filtration significantly slows down the rate at which aggressive substances reach the Ag/AgCl reference, safeguarding the sensor's core measurement integrity.

UNITED STATE PATENT CERTIFICATE NO. : US 12540912 B2
TAIWAN PATENT CERTIFICATE NO. : I880497

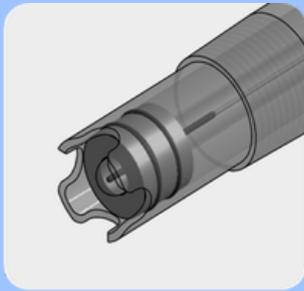
APPLICATIONS

- PETROCHEMICAL
- SCRUBBER
- FLUE-GAS DESULFURIZATION (FGD)
- WASTE WATER
- NEUTRALIZATION PROCESS
- KRAFT AND CHEMICAL PULPING
- SEMICONDUCTOR WASTE WATER
- SEWAGE EFFLUENT
- DYE AND PIGMENTS
- HIGH TEMPERATURE
- HIGH PRESSURE
- STRONG ACID
- STRONG CAUSTICS
- HYDROFLUORIC ACID (HF) PROCESS
- SODIUM CYANIDE (NACN) PROCESS

GLASS OPTION

Glass Type	Applications	Measurement Range	Temperature Measurement Range	Max. Temp. Range
Hydrofluoric acid resistant	For Hydrofluoric acid environment	0 to 14 pH	0 to 80°C	90°C
Coating resistant hemi-glass	Coating resistant, Regular process	0 to 14 pH	0 to 80°C	90°C
Low temperature glass	For Low Temperature Application	2 to 11 pH	-20 to 50°C	90°C
High temperature glass	For High Temperature Application	0 to 14 pH	15°C to 135°C	140°C
Platinum glass	Redox(ORP) measurement	+/- 1000 mV	0 to 100°C	90°C
Coating resistant flat-glass	Coating resistant, Regular process	0 to 14 pH	0 to 80°C	90°C
Pure water Hemi-glass	For Pure water application	0 to 14 pH	0 to 80°C	90°C
RTD Bulid-in type glass				
Coating resistant hemi-glass	Coating resistant, Regular process	0 to 14 pH	0 to 80°C	90°C
High temperature glass	For High Temperature Application	0 to 14 pH	15°C to 135°C	140°C
Coating resistant flat-glass	Coating resistant, Regular process	0 to 14 pH	0 to 80°C	90°C

FEATURE OF BUILT-IN TEMPERATURE SENSOR



Temperature is vital for accurate pH measurement, as even small fluctuations can significantly influence the activity of hydrogen ions and the sensor's response. For this reason, LECOL pH sensors are specially engineered with the temperature sensor installed directly in front of the glass electrode. This innovative placement ensures immediate thermal detection at the point of measurement, allowing the transmitter to compensate quickly and precisely. The result is faster response, higher accuracy, and improved stability—particularly beneficial in rapidly changing or critical process environments. LECOL's design reflects our commitment to precision and performance in every application.

LIQUID JUNCTION OPTION

Liquid Junction	Applications
TEFLON (PTFE)	For Regular Process
WOOD	For Samples Prone to Oil or Hydrocarbon Fouling

TEFLON LIQUID JUNCTION



TEFLON LIQUID JUNCTION WITHOUT NOTCHED



TEFLON LIQUID JUNCTION WITH SOLUTION GROUND



WOOD LIQUID JUNCTION



FEATURE OF LIQUID JUNCTION

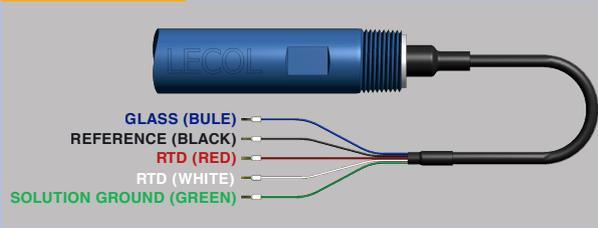
The liquid junction is a key element in any pH sensor, forming the interface between the internal reference electrolyte and the sample solution. Its quality directly influences measurement accuracy, response time, and resistance to contamination. Poorly designed junctions are prone to clogging or fouling, leading to signal drift, delayed readings, or even sensor failure.

To overcome these issues, LECOL pH sensors incorporate a large-area liquid junction. This expanded contact surface improves ion exchange efficiency and reduces the risk of clogging—making it particularly suitable for challenging environments such as slurries or viscous liquids. The result is enhanced stability and longer sensor life in industrial processes.

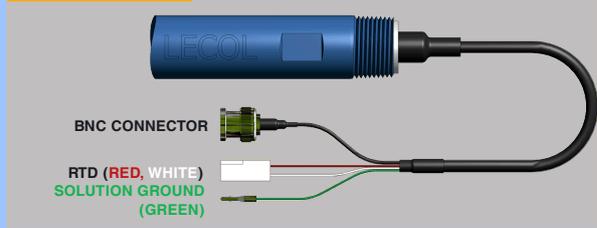
In addition, LECOL offers a specialised wood-based liquid junction. Compared to synthetic materials like PTFE, the natural porosity of wood enables better ion diffusion and resists hydrocarbon fouling more effectively. This makes it ideal for oily or organic-rich applications where other materials fail. Acting as a natural filter, the wood junction offers long-term performance with less frequent maintenance.

SENSOR WIRING

TINNED LEADS



BNC CONNECTOR



EXTENSION CABLE



TEMPERATURE COMPENSATION

- PT100 RTD
- PT1000 RTD

COMPRESSION FITTING MATERIAL OPTION

- VITON
- FFKM

COMPRESSION FITTING MATERIAL OPTION

- SS316 (P/N:LECFSS)
- HASTELLOY C276 (P/N:LECFHS)
- TITANIUM (P/N:LECFTS)

316SS ISOLATION VALVE SIZE OPTION

- 1-1/4 IN. NPT, INCLUDES 1" TO 1-1/4" REDUCING BUSHING & 1-1/4" NIPPLE (P/N: LEIV-B01)
- 1-1/4 IN. NPT, INCLUDES 1-1/2" TO 1" REDUCING BUSHING & 1-1/2" NIPPLE (P/N: LEIV-A01)

SENSOR INSTALLATION RECOMMENDATION

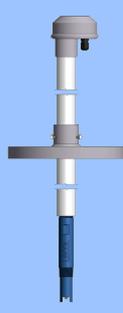
IN-LINE TYPE



IN-LINE TYPE

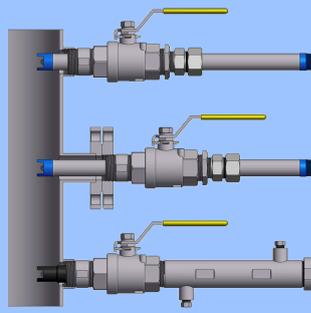


- 316 SS FLOW CHAMBER**
- 1/2 IN. FNPT
- WITH FLANGE**
- 1/2 IN. 150#RF
 - 3/4 IN. 150#RF
 - 1 IN. 150#RF



IMMERSION PIPE

HOT-TAP TYPE



HOT-TAP

HOT-TAP WITH FLANGE

HIGH PRESSURE HOT-TAP

B65 HARSH ENVIRONMENT PH SENSOR

The LECOL B65 pH/ORP sensor is engineered for reliable performance in harsh industrial environments. It features a rigid, chemical-resistant RYTON body and can be installed in-line via its 3/4-inch NPT thread or immersed directly into process liquids. The sensor incorporates LECOL's patented ION BARRIER reference system, which provides exceptional resistance against chemical attack and extends sensor lifespan. Additionally, its large liquid junction increases contact area with the sample, reducing clogging risks and improving measurement stability.

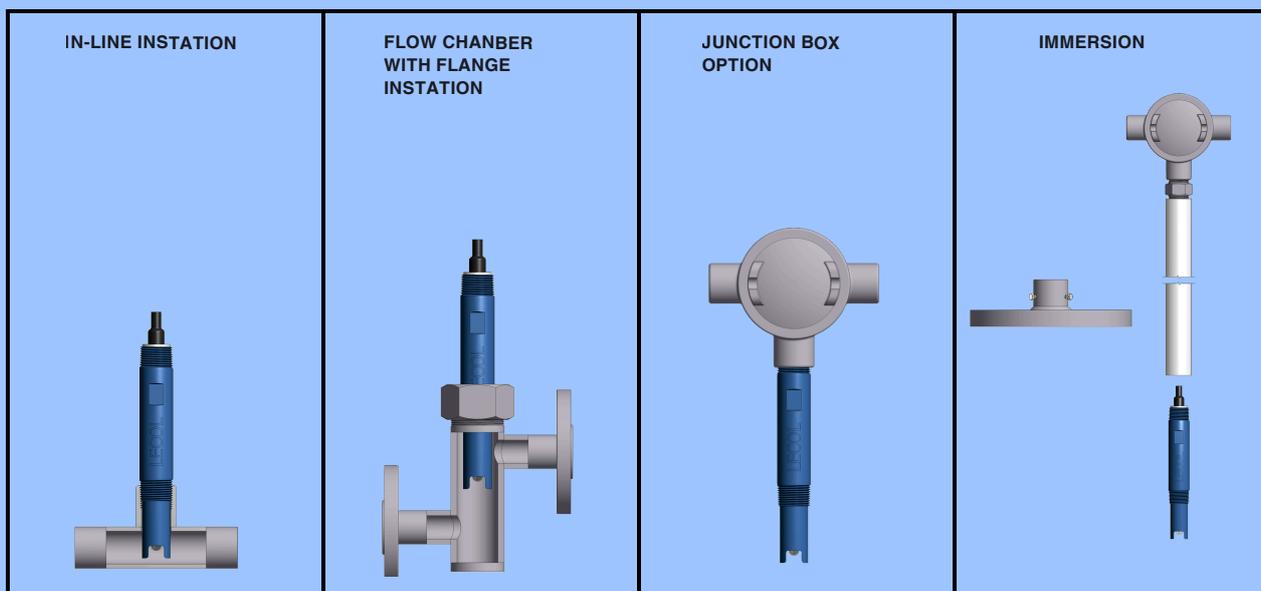


Specifications	
Measuring range	: pH : 0 ~ 14pH ORP : - 2000~2000 mV
Body material	: PPS (Ryton)
Liquid junction	: Porous Teflon Wood
Temp. compensator	: PT100 PT1000
Operating temperature	: < 140 °C
Operating rating	: 10 bar at 70 °C 2.8 bar at 135 °C
Process connection	: 3/4 in. NPT
Insert length	: 1.5 inch

Applications for B65

- Neutralization process
- Waste emission
- Flue gas desulfurization
- Sewage effluent
- Waste water treatment
- Kraft and chemical pulping
- Dye and pigments
- Semiconductor waste water

Dimensions



harsh environment pH/ORP sensor

Model: B65

X-

X-

X-

X-

X-

X

A Measuring electrode

- 1 pH - Hydrofluoric Acid Resistant
- 2 pH - Coating Resistant, Standard Hemi-glass
- 3 pH - Low temperature (-20 to 50°C) (2 - 11 pH)
- 4 ORP - Platinum ORP
- 5 pH - High temperature 15°C to 135°C
(withstanding up to 140°C temporarily)
- 6 pH - Coating Resistant, flat-glass

B Temperature compensator

- 0 None
- 1 PT100, tinned leads
- 2 PT1000, tinned leads

C Liquid Junction

- 1 Wood notched
- 2 Teflon notched

D Insert length

- 1 1.5 Inch
- 2 4.25 Inch

E Cable length

- 0 10 cm with quick connector
- 1 3M
- 2 6M
- 3 9M

F Accessory

- 0 None
- Flow Chamber 316 SS
- 1 1/2 in. FNPT P/N: LEFCB6-ST12
- 2 1/2 in. 150#RF P/N: LEFCB6-SF12
- 3 3/4 in. 150#RF P/N: LEFCB6-SF34
- 4 1 in. 150#RF P/N: LEFCB6-SF11
- 8 Junction Box P/N: LEJB

B67 QUICK-NUT PH/ORP SENSOR

The LECOL B67 Quick-nut pH/ORP sensor is designed for installations with limited space, complex piping, and demanding industrial environments. Suitable for in-line flow-through applications, it features a durable PPS body that provides excellent chemical resistance. The Quick-nut adapter system simplifies routine calibration and cleaning by allowing easy sensor removal. It incorporates LECOL's advanced ION BARRIER reference system, which significantly improves chemical resistance and prolongs sensor life. This design also prevents cable twisting during installation, reducing mechanical stress and ensuring long-term measurement stability.

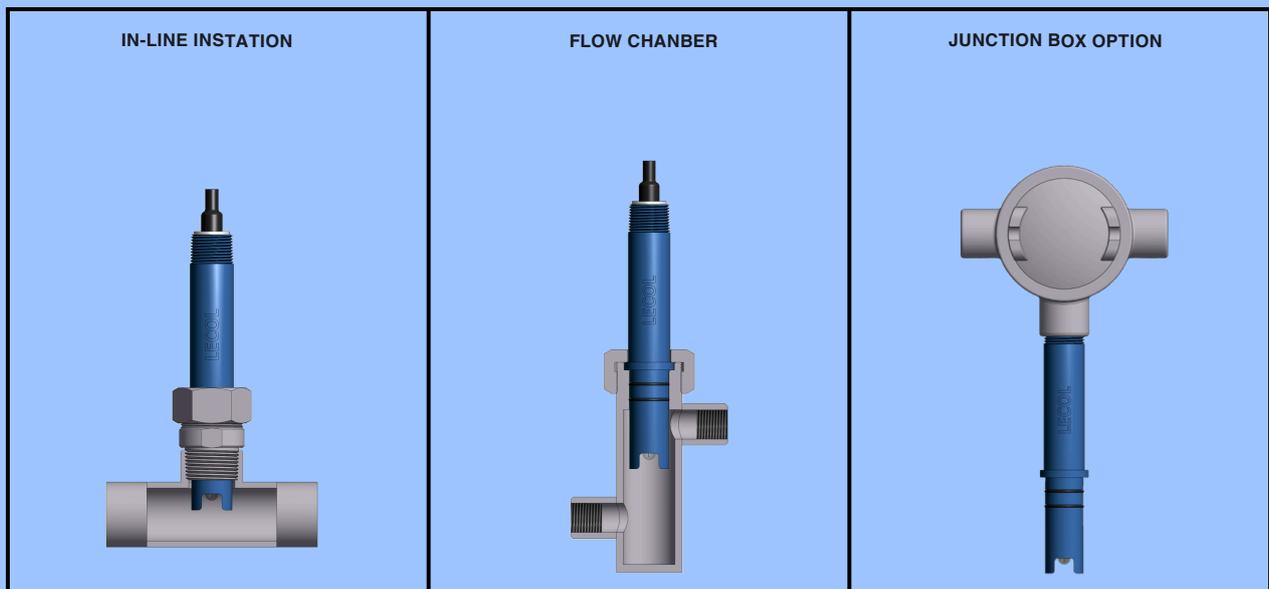
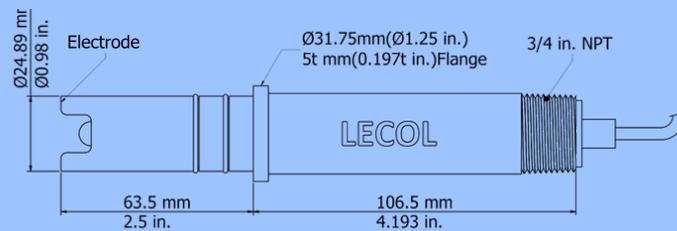


Specifications	
Measuring range	: pH : 0 ~ 14pH
	ORP : - 2000~2000 mV
Body material	: PPS (Ryton)
Liquid junction	: Porous Teflon
	Wood
Temp. compensator	: PT100
	PT1000
Operating temperature	: < 140 °C
Operating rating	: 10 bar at 70 °C
	2.8 bar at 135 °C
Insert length	: 2.5 inch

Applications for B67

- Neutralization process
- Waste emission
- Flue gas desulfurization
- Sewage effluent
- Waste water treatment
- Kraft and chemical pulping
- Dye and pigments
- Semiconductor waste water

Dimensions



B67 Quick-Nut pH/ORP sensor

Model: B67

X-

X-

X-

X-

X-

X

A Measuring electrode

- 1 pH - Hydrofluoric Acid Resistant
- 2 pH - Coating Resistant, Standard Hemi-glass
- 3 pH - Low temperature (-20 to 50°C) (2 - 11 pH)
- 4 ORP - Platinum ORP
- 5 pH - High temperature 15°C to 135°C
(withstanding up to 140°C temporarily)
- 6 pH - Coating Resistant, flat-glass

B Temperature compensator

- 0 None
- 1 PT100, tinned leads
- 2 PT1000, tinned leads

C Liquid Junction

- 1 Wood notched
- 2 Teflon notched

D Cable length

- 0 10 cm with quick connector
- 1 3M
- 2 6M
- 3 9M

Accessory

F Quick Nut

- 0 None
- 1 Quick Nut P/N: LEFCB6-ST12

F Hardware

- 0 None
- Flow Chamber 316 SS
- 1 1/2 in. FNPT P/N: LEFCB6-ST12
- 2 1/2 in. 150#RF P/N: LEFCB6-SF12
- 3 3/4 in. 150#RF P/N: LEFCB6-SF34
- 4 1 in. 150#RF P/N: LEFCB6-SF11
- 8 Junction Box P/N: LEJB

B64 PURE WATER PH SENSOR

The LECOL B64 pH sensor is specifically designed for ultrapure and high-purity water applications. It features a patented Hydronis reference system with a solid, elastic, hydrophilic structure that offers high water retention. This design allows the internal KCl to remain stable over long periods, effectively preventing the reference from drying out. Additionally, it minimises the risk of ionic contamination from the sample—a common cause of sensor failure in ultrapure water, deionised water, and other low-conductivity environments. With its robust construction and stable reference potential, the B64 ensures long-term accuracy and reliability in demanding water quality monitoring applications.



Specifications	
Measuring range	: pH : 0 ~ 10pH
Body material	: ABS
Liquid junction	: Porous Teflon Wood
Temp. compensator	: PT100 PT1000
Operating temperature	: < 80 °C
Operating rating	: 6 bar at 80 °C
Process connection	: 3/4 in. NPT 1 in. NPT

Applications for B64

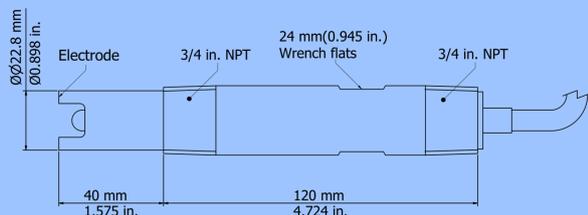
- Boiler steam and drum water
- Steam condensate
- Steam and water recycle
- Reverse osmosis

Patent No.

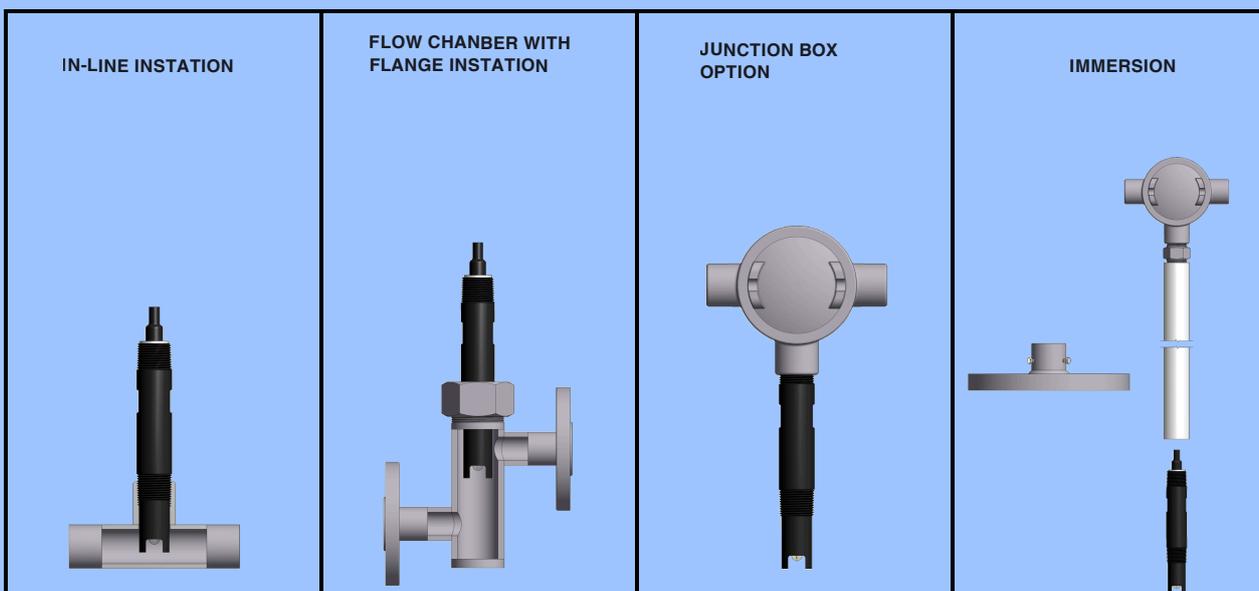
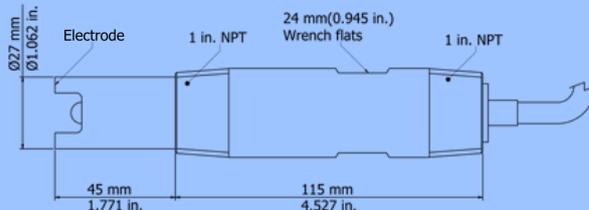
- USA patent pending no. 17/652711
- China patent no.202122720763.1

Dimensions

3/4 in. NPT



1 in. NPT



Pure Water pH Sensor

Model: B64

X- X- X- X- X- X- X

A Measuring electrode

- 1 pH - Coating Resistant, Standard Hemi-glass
- 2 pH - Pure water application, Hemi-glass (<80°C)
- 4 pH - Coating resistant, Hemi-glass with PT100 temperature inside glass (<80°C)
- 5 pH - Coating Resistant, flat-glass

B Temperature compensator

- 0 None
- 1 PT100, tinned leads
- 2 PT1000, tinned leads

C Liquid Junction

- 1 Wood notched
- 2 Teflon notched

D Process Connection

- 1 3/4 in. NPT
- 2 1 in. NPT

E Cable length

- 0 10 cm with quick connector
- 1 3M
- 2 6M
- 3 9M

F Solution Ground

- 0 None
- 1 316 SS

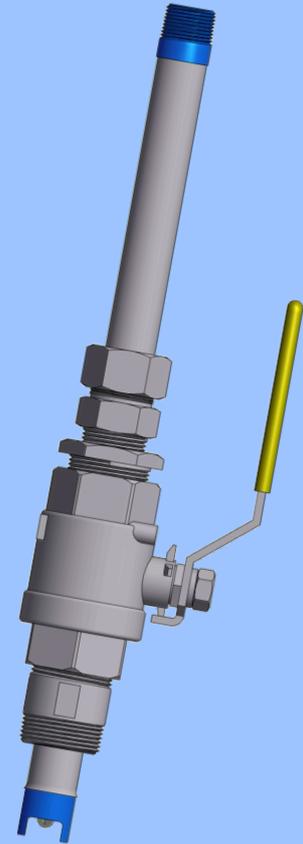
G Accessory

- 0 None
- Flow Chamber 316 SS
- 1 1/2 in. FNPT P/N: LEFCB6-ST12
- 2 1/2 in. 150#RF P/N: LEFCB6-SF12
- 3 3/4 in. 150#RF P/N: LEFCB6-SF34
- 4 1 in. 150#RF P/N: LEFCB6-SF11
- 8 Junction Box P/N: LEJB

B75 HOT-TAP/ INSERTION PH SENSOR

The LECOL B75 hot-tap pH sensors are designed for direct insertion into pressurised processes using a 1-1/4" ball valve assembly, allowing safe installation and retraction without process shutdown. A flared safety tip prevents accidental ejection during sensor removal, enhancing operator safety. The sensor features a corrosion-resistant PVDF body and is housed in a reusable stainless steel sheath, available in multiple lengths to suit various insertion requirements. Designed with LECOL's patented ION BARRIER reference system, the B75 offers high stability, resistance to chemical attack, and long-term performance in demanding applications such as chemical reactors, scrubbers, and high-pressure pipelines.

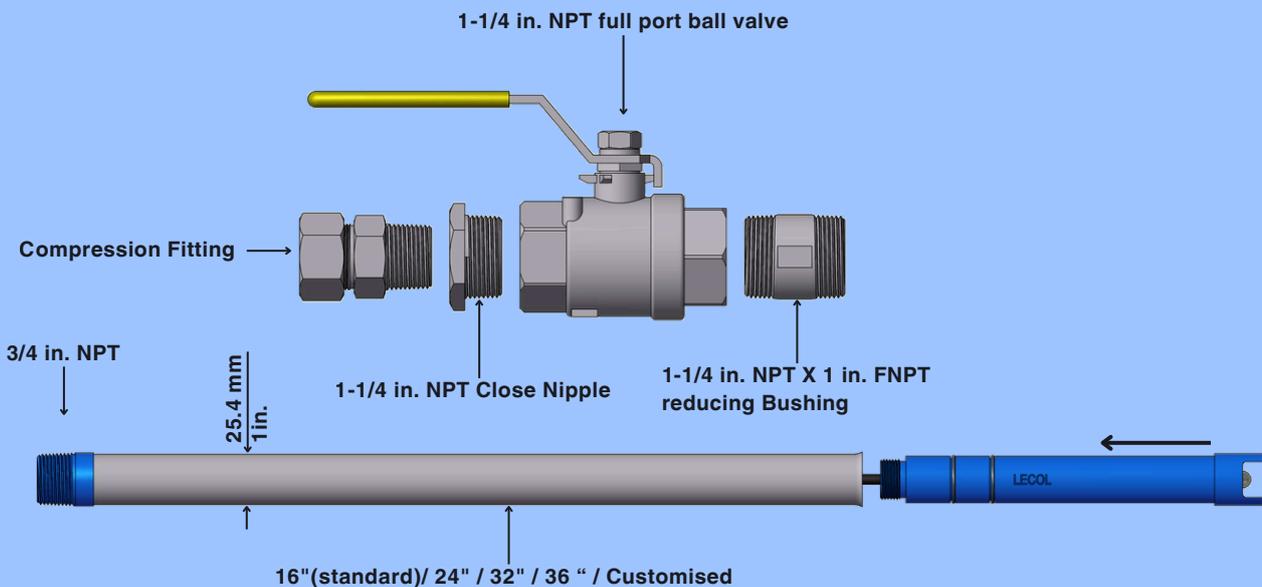
Specifications	
Measuring range	: pH : 0 ~ 14pH
	ORP : - 2000~2000 mV
Inner sensor body material	: PVDF
Liquid junction	: Porous Teflon
	Wood
Temp. compensator	: PT100
	PT1000
Operating temperature	: < 140 °C
Operating rating	: 10 kg/cm2 at 70 °C
	2.8kg/cm2 at 135 °C
Outer sleeve Material	: 316LSS
	Hastelloy C
Compression fitting Material	: 316LSS
	Hastelloy C
	Titanium
O-ring	: Viton
	FFKM (Optional)
Outer Sleeve length	: 16"(standard)/ 24" / 32" / 36 " / Customised



Applications for B75

- Recirculation piping
- Large pipes without sample lines
- Tank side mounting
- Cooling water circulation

Dimensions



Hot-tap/ insertion pH/ORP sensor

Model: B75

X- X- X- X- X- X- X- X- X-

A Measuring electrode

- 1 pH - Hydrofluoric Acid Resistant
- 2 pH - Coating Resistant, Standard Hemi-glass
- 3 pH - Low temperature (-20 to 50°C) (2 - 11 pH)
- 4 ORP - Platinum ORP
- 5 pH - High temperature 15°C to 135°C
(withstanding up to 140°C temporarily)
- 6 pH - Coating Resistant, flat-glass

B Temperature compensator

- 0 None
- 1 PT100, tinned leads
- 2 PT1000, tinned leads

C Liquid Junction

- 1 Wood notched
- 2 Teflon notched

D O-ring

- 1 Viton
- 2 FFKM

E Sleeve length

- 0 None, spare sensor only
- 1 16 in. Hot tap, (P/N:LEIV-01)
- 2 24 in. Hot tap, (P/N:LEIV-02)
- 3 32 in. Hot tap, (P/N:LEIV-03)
- 4 36 in. Hot tap, (P/N:LEIV-04)

F Compression fitting

- 0 none
- 1 316SS Compression fitting/ Viton O-ring P/N:LECFSS-V
- 2 316SS Compression fitting/ FFKM O-ring P/N:LECFSS-F
- 3 Titanium Compression fitting/ Viton O-ring P/N:LECFTS-V
- 4 Titanium Compression fitting/ FFKM O-ring P/N:LECFTS-F
- 5 C276 Compression fitting/ Viton O-ring P/N:LECFHS-V
- 6 C276 Compression fitting/ FFKM O-ring P/N:LECFHS-F

G Isolation Valve

- 0 None
- 1 316 SS, 1-1/4 in. NPT P/N: LEIV-B01
(includes 1" to 1-1/4" reducing bushing & 1-1/4"nipple)
- 2 316 SS, 1-1/2 in. NPT P/N: LEIV-A01
(includes 1-1/2" to 1" reducing bushing & 1-1/2"nipple)

H Cable length

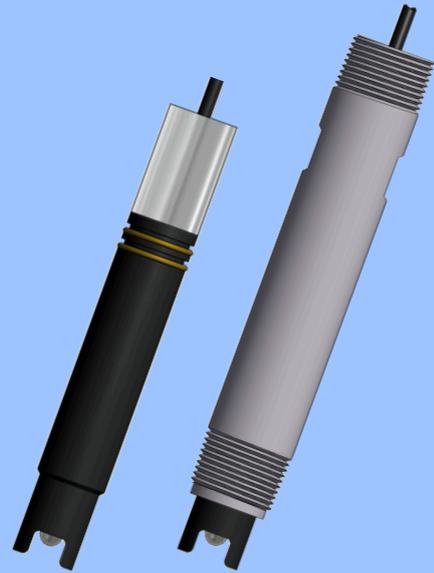
- 0 10 cm with quick connector
- 1 3M
- 2 6M
- 3 10M
- 4 15M
- 5 30M

I Accessory

- 0 None
- 8 Junction Box P/N: LEJB

B85 HIGH PRESSURE PH SENSOR

The LECOL B85 pH sensor is engineered for high-pressure, high-temperature industrial applications requiring continuous and reliable pH monitoring. Constructed with a robust Ryton (PPS) body and stainless steel housing, it offers excellent durability and chemical resistance under extreme process conditions. Its design supports direct installation into pressurised systems, ensuring safe and stable performance. The sensor features LECOL's patented ION BARRIER reference system, which significantly enhances stability and protects against contamination, reducing maintenance and prolonging service life. With its advanced construction and reference technology, the B85 provides accurate, long-term pH measurement in demanding environments where conventional sensors often fail.

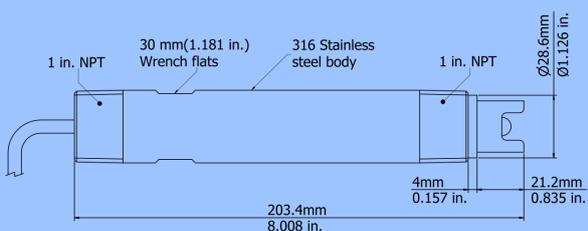
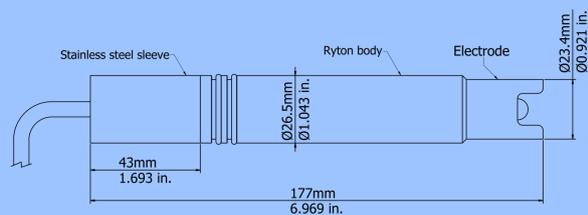


Specifications	
Measuring range	: pH : 0 ~ 14pH ORP : - 2000~2000 mV
Body material	: PPS (Ryton)
Liquid junction	: Teflon notched Wood notched
Temp. compensator	: PT100 PT1000
Operating temperature	: < 140 °C
Operating rating	: 20 bar MAX 135 °C MAX
Housing material	: 316SS

Application for B85

- High pressure pipe line
- High pressure application

Dimensions



SS316 HOUSING INSTALLATION

TWO PARTS:

- 316SS HOUSING
- PPS BODY SENSOR



pH/ORP Sensor for High Pressure

Model: B85

X-

X-

X-

X-

A Measuring electrode

- 1 pH - Hydrofluoric Acid Resistant
- 2 pH - Coating Resistant, Standard Hemi-glass
- 4 ORP - Platinum ORP
- 5 pH - High temperature 15°C to 135°C
(withstanding up to 140°C temporarily)

B Temperature compensator

- 0 None
- 1 PT100, tinned leads
- 2 PT1000, tinned leads

C Cable length

- 0 10 cm with quick connector
- 1 3M
- 2 6M
- 3 9M

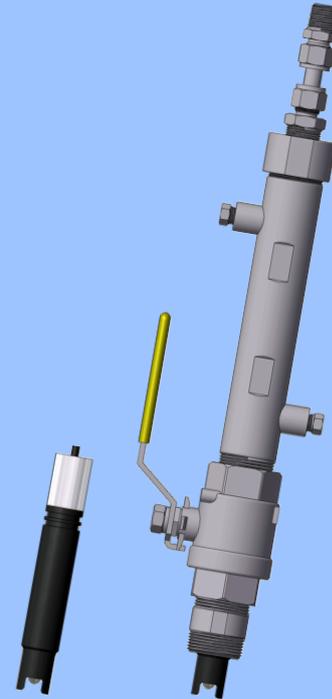
D Accessory

- 1 None
- 2 316SS housing

P/N: LEHS85

B86 HOT-TAP TYPE HIGH PRESSURE PH SENSOR

The LECOL B86 is a retractable pH sensor specifically designed for high-pressure applications, featuring a durable RYTON (PPS) body and stainless steel housing for superior chemical and mechanical resistance. Its retractable hot-tap design allows safe and convenient maintenance or sensor replacement without interrupting the process, maximising system uptime. The B86 is equipped with LECOL's patented ION BARRIER reference system, which offers excellent protection against chemical attack and contamination. This ensures long-term measurement stability and reduces maintenance frequency. With its rugged construction and advanced reference technology, the B86 is the ideal choice for reliable pH monitoring in the most demanding process conditions.

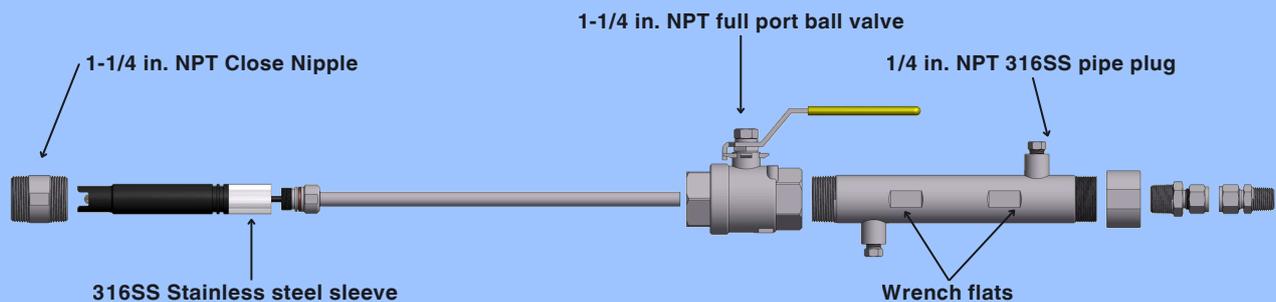
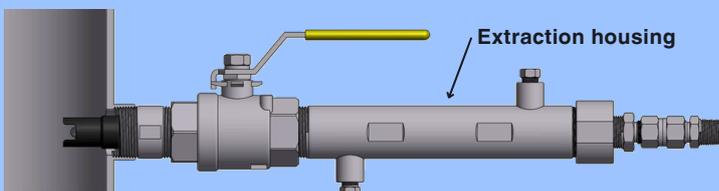
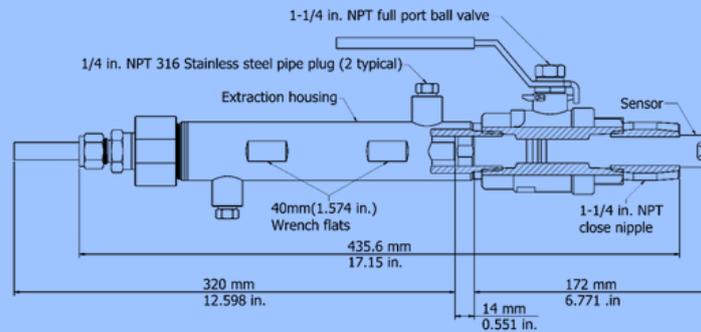


Specifications	
Measuring range	: pH : 0 ~ 14pH ORP : - 2000~2000 mV
Body material	: PPS (Ryton)
Liquid junction	: Teflon notched Wood notched
Temp. compensator	: PT100 PT1000
Operating temperature	: < 140 °C
Operating rating	: 20 bar MAX 135 °C MAX
Housing material	: 316SS

Applications for B86

- High Pressure tank side mounting
- Outlet of Pump
- High Pressure Application

Dimensions



Hot-tap pH/ORP Sensor for high pressure

Model: B86

X- X- X- X

A Measuring electrode

- 1 pH - Hydrofluoric Acid Resistant
- 2 pH - Coating Resistant, Standard Hemi-glass
- 4 ORP - Platinum ORP
- 5 pH - High temperature 15°C to 135°C
(withstanding up to 140°C temporarily)

B Temperature compensator

- 0 None
- 1 PT100, tinned leads
- 2 PT1000, tinned leads

C Cable length

- 0 10 cm with quick connector
- 1 3M
- 2 6M
- 3 9M

D Accessory

- 0 None
- 1 316SS extraction housing without isolation valve P/N: LEHS-
- 2 316SS extraction housing with isolation valve P/N: LEHS-IVB01

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