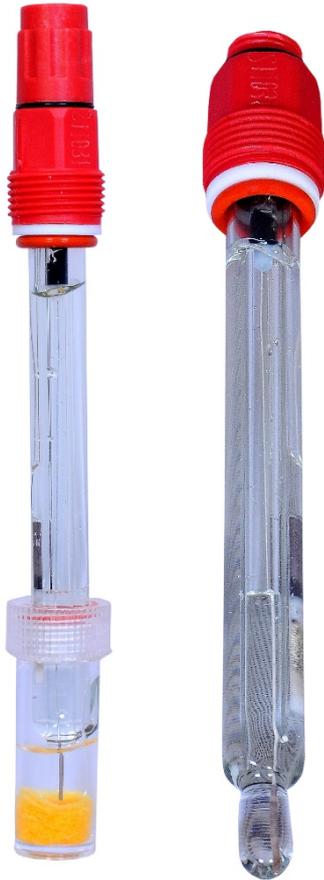


## Sterilizable pH Sensor

### MS pH 04 Ferm



#### FEATURE

- Sterilizable / Autoclavable
- Gel electrolyte
- Sterilization Temperature up to 130°C
- 35 Steam Cycles - Ensures fast & accurate long life in actual process conditions
- Fast, Accurate, Improved Stability, Reliable
- 120, 170, 220, 270 and 320 mm Length available
- Compatible with any make pH Transmitter

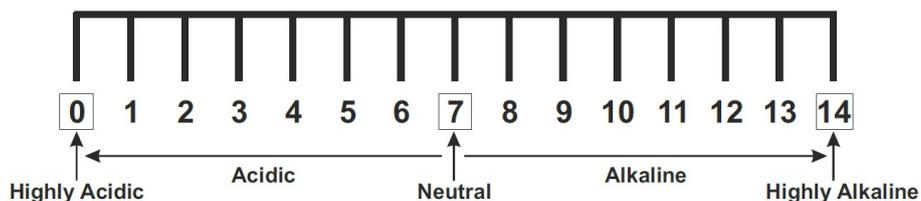
#### DESCRIPTION

Designed for accuracy and stability in a heat intensive application, the new MS pH 04 Ferm series pH sensors are optimized for autoclaving and steam sterilization in biotechnology applications. MS pH 04 sensors exhibit unparalleled stability after exposure to high temperature sterilization. The reference electrode uses a silver silver chloride sensor in combination with a new gelled potassium chloride electrolyte to provide a stable reference potential through the single ceramic reference junction.

#### PRINCIPLE

##### Why is pH Measurement required ?

To check the acidic or alkaline nature of aqueous solution. pH (Potential Hydrogen) is unit of measurement, used to determine the Acidity or Alkalinity of an aqueous solution. Practical pH scale for industrial instrumentation ranges from 0 to 14 pH. The acidic substances range from 0 to 6 and on the other end are the alkaline substances, which range from 8 to 14, with pH 7 being neutral, this is the pH of pure water which is neither very acidic nor very alkaline, is said to be neutral.



##### How is pH measured ?



Although everyone is familiar with Litmus paper, the only reliable way to measure pH is using Potentiometric Combination electrodes. These electrodes develop a millivolts output corresponding to pH value of solution which is directly proportional to the Free Hydrogen ion concentration in an aqueous Solution. These generated raw mill volts are fed to MS pH 04 Fern where it is processed by amplifier & reading is displayed on meter

## TECHNICAL SPECIFICATION

pH Range	: 0 ~ 14 pH
Body	: Glass
Temperature Range	: 0 to 130°C
Operating Pressure	: 6 Bar
Electrolyte	: Gel
Reference Junction	: Single Ceramic Junction
Sterilization temperature	: 130°C
Shaft Length below Threads	: 120 mm (Other Lengths on request at Extra Cost)
Shaft Diameter	: 12 mm
Electrical Connection	: S8
Process Connection	: PG 13.5

## APPLICATION

Bioengineering	: Amino acids, blood products, gene, insulin and interferon.
Pharmaceutical	: Antibiotics, vitamins and citric acid
Beer	: Brewing, mashing, boiling, fermentation, bottling, cold wort and deoxy water
Food and beverages	: On-line measurement for MSG, soy sauce, dairy products, juice, yeast, sugar, drinking water and other bio-chemical process.

Note : Due to continuous improvement in product, specifications & appearance may vary