

**pH ELECTRODES FOR  
HIGH PERFORMANCE, HIGH TEMP. INDUSTRIAL APPLICATION  
Model TCHEM**



**Membrane Glass:** A wide selection of different pH-sensitive glass membranes (Green, Blue etc.) ensures the best possible measurement performance, based on the application for Low pH/ HF applications/ Full Range/ High Alkaline etc.

**Reference Fill & Construction:** These electrodes are sealed with special HGel+ reference fill gel suitable for demanding industrial and process applications.

**Temperature Compensation (Built In)** (optional): The inbuilt temperature elements allow for the automatic compensation of Nernstian temperature effects in processes with wide pH ranges and significant temperature shifts. The temperature element is either a Pt100 or Pt1000 or 30K NTC, which are compatible with the majority of commercially available instruments.

**Reference System:** The sensor is provided with a Ag/ Ag Wire (Double Junction with Ceramic) reference system, to prevent & delay the reference fouling process.

**Connections:** The Cap/ Threaded Rotatable Cap\* (TRC)/ Variopin (V)/ S8/ S7 connections allows for a multiple connection suiting different needs; both pH signal and temperature signal in the same wiring harness.

**pH:** The TCHEM family of pH electrodes are ideal for any industry for low or high pH, HF application or high temp. applications demanding high performance from an electrode.

**TOSHNIWAL INSTRUMENTS MANUFACTURING PVT. LTD.,**

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REGD OFFICE: 401, Manish Chamber, Sonawala Cross Lane, Goregaon (E), MUMBAI - 400 063

## TECHNICAL SPECIFICATIONS:

1. pH Range : 0 - 14
2. Operating Temperature : -5 to 100°C
3. Slope : 59 ±3 mV at 25°C
4. Zero Point : pH 7
5. Asymmetry Potential : 0±25 mV
6. No. of Junctions : Double
7. Glass Membrane Impedance : <300 MΩ at 25°C
8. Membrane Glass : Green (Fast response)
9. Temp. Compensation : Pt100/ Pt1000/ 30K NTC
10. Pressure : Up to 6 Bar at 25° C
11. Reference Electrolyte : HGel+ / CLP+
12. Diaphragm : Annular Ceramic, Additional Ceramic
13. Reference System : Ag/ Ag Wire (Double Junction with Ceramic)
14. pH Storage Solution : TOSHCON storage solution
15. Shape of Membrane : Spherical
16. Diameter : 12 mm
17. Shaft Length (A) : 120 mm etc.
18. Shaft Material : Glass
19. O Ring : EPDM (in case of S8/ S7/ VP connectors etc.)
20. Connector type : Cap/TRC\* with BNC with Low-Noise Coaxial Cable or S8 (PG 13.5)/ S7 or Variopin (V) or any other connector requested.
21. Suitability : Suitable/ compatible with mostly all make instruments.

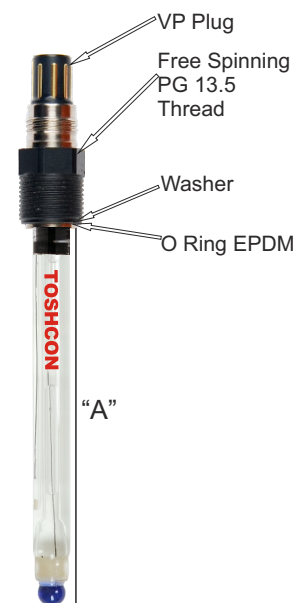


**ORDERING CODE**

**TCHEM - X - X - X - X - X - X**

<b>Bulb:</b>	
Green	-
Blue	- B
<b>Cap/ Connector:</b>	
Cap	-
Threaded	-
Rotatable Cap	- TRC
PG 13.5	- S8
S7	- S7
Variopin	- V
<b>No. of Junction:</b>	
Single	-
Double	- D

<b>Cable Length for Cap Electrode:</b>	
1 Mtr.	-
3 Mtrs.	- 3
5 Mtrs.	- 5
9 Mtrs.	- 9
13 Mtrs.	- 13
<b>Temp. Compensator:</b>	
Without	-
Pt100	- T
Pt1000	- 1T
30K NTC	- 3T
<b>Gel:</b>	
HGel+	-
Polymer Hard Gel (CLP+)	- P



### OTHER INDUSTRY:

Pharma, Petrochemical, Swimming Pools, Aquarium, Electroplating, Food, Chemical, Fertilizer, Dairy, Oil, Drinking Water, Ground Water, Waste Water

### OTHER APPLICATIONS:

Extreme pH (Acidic), Extreme pH (Alkali), Narrow Vessel/ Semi Micro, Low Ionic/ Ultrapure, Oil/ Water Emulsion, HF, Low Temp. (-30°C), High Temp. (135°C), Steam Sterilisable

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