

INDUSTRIAL SERIES pH ELECTRODES

High Alkaline Electrode

MODEL No: INP-150E

INTRODUCTION:-

These electrodes are well suited for pH levels above 13 or for measurements in high sodium ion concentrations. Double junction reference protects against contamination from heavy metals, organics and sulfides.



Features :

1. Amber glass pH electrode for high sodium ion concentration solution.
2. Double junction electrode to protect against contaminations from heavy Metals, organics and sulphides.
3. Directly pluggable to immersion assembly¹
4. SS316L meets the highest requirement of the pharmaceutical industry.
5. Inbuilt ATC (pt-100).

Specifications :

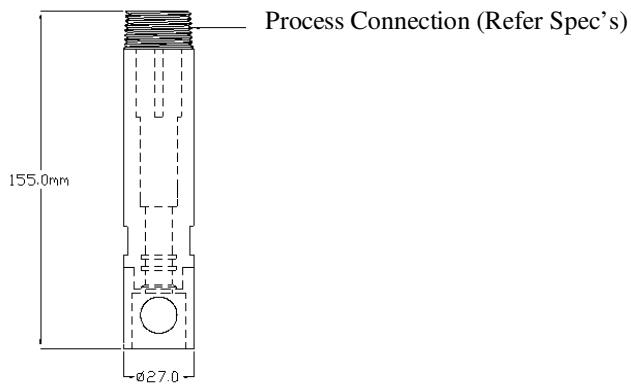
| Ordering Code | INP-150E-01 | INP-150E-03 | INP-150E-06 | INP-150E-09 | INP-150E-11 | INP-150E-12 |
|-------------------------|--|-------------------------|--|--|-------------------------|-------------------------|
| Electrode Specs: | | | | | | |
| Electrode Type | Amber glass double junction | | | | | |
| Liquid Junction | Annular Ring | | | | | |
| PH Range | 0 – 14 pH | | | | | |
| Operating Temperature | 0 – 110 °C | | | | | |
| Cable Length | 10 feet | | | | | |
| Termination Type | Cable lugs (Optional BNC connector) | | | | | |
| Cable Type | Coaxial, 2 wire, Teflon low noise shielded cable | | | | | |
| Material | SS316L | PP | SS316L | SS316L | PTFE | PP |
| Orings | Viton – ‘o’ - rings | | | | | |
| Process Connection | ¾ “ NPT (M) | 1” NPT (M) | Coupling, OD: 42mm, 11 TPI threading | 1” NPT (M) | 1” BSP (M) | 1” NPT (M) |
| Application | Immersion | Immersion | Sidemount | Immersion | Immersion | Flow Through |
| Insertion Depth | Connect to the required extension pipe ¹ | | 87 mm | Connect to the required extension pipe ¹ | | 45 mm |
| Dimensions (mm) | O.D : 27 Length: 155 | O.D : 32 Length: 155 | O.D : 27 | O.D : 50 Length: 155 | O.D : 50 Length: 155 | O.D : 27 Length: 155 |
| Pressure | 75 psi (Max.) | | | | | |
| Wetted parts | Glass, SS316L | Glass, PP | Glass, SS316L | Glass, PP | Glass, PTFE | Glass, PP |

PP - Poly Propylene

| | |
|-----------------------------|------------------------------------|
| Temperature Sensor : | MODEL NO: INP-150S-01 |
| ATC Element | Pt – 100, DIN 43760 |
| Temperature range | 0°C to 110°C |
| Cable Length | 10 feet |
| Termination type | Cable lugs |
| Cable type | 7/32, 3 core Teflon – Teflon cable |

Note: Use ATC probe Model No.: INP 150S-01 for 1” PP flow high alkaline electrode (without ATC)
Model No.: INP-150E-12

Mechanical Drawing of Electrode:-



Industrial pH Assembly

1). Industrial pH assembly with 3/4" FNPT SS for HA electrode¹ (Model No. INP 150A-01-S-3)

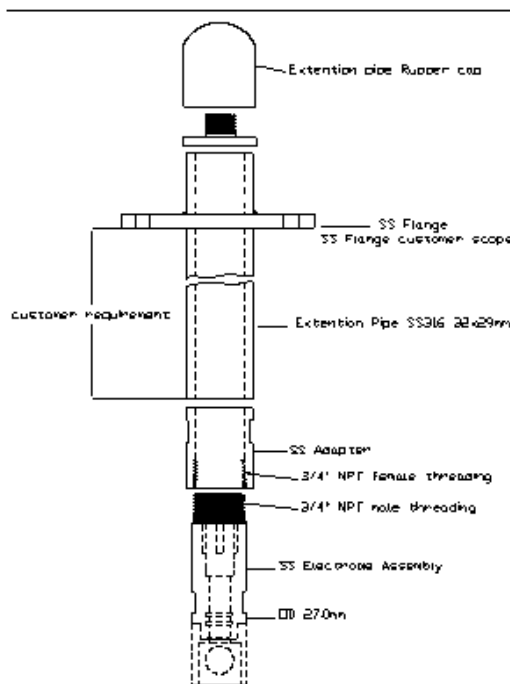
Features:-

- Suitable to large volume of reactors pH measurement.
- SS 316L meets the highest requirement of pharmaceutical industry.

Applications:-

- Immersion type pH measurements.
- pH measurement for industrial, chemical process applications.
- Bulk Drug plants.
- DM plant.

¹Suitable to 3/4" NPT SS high alkaline Electrode (with ATC)
INP 150E-01



2). Industrial pH assembly with 1"PP for High Alkaline electrode² (Model No. INP 150A-03-P-3)

Features:-

- Suitable to large volume of reactors pH measurement.
- PP encapsulated with SS 304 support.
- Flange end connection is provided.

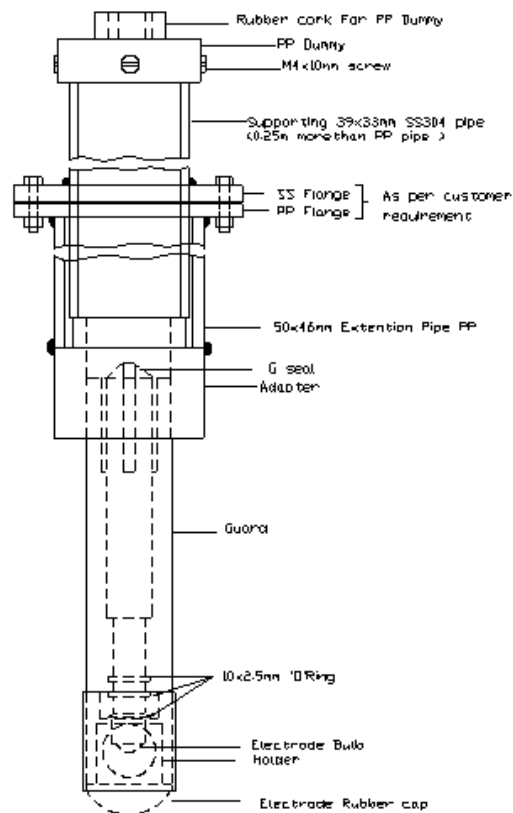
Applications:-

- Immersion type pH measurements.
- pH measurement for industrial, chemical process applications.
- Effluent treatment plants.
- Bulk Drug plants.
- DM plant.

²Suitable to

1" PP high alkaline Electrode (with ATC) INP 150E-03

2" PP high alkaline Electrode (with ATC) INP 150E-09



3). Industrial Ph assembly with 1"FBSP Teflon forTeflon HA electrode³(Model No. INP 150A-11-T-3)

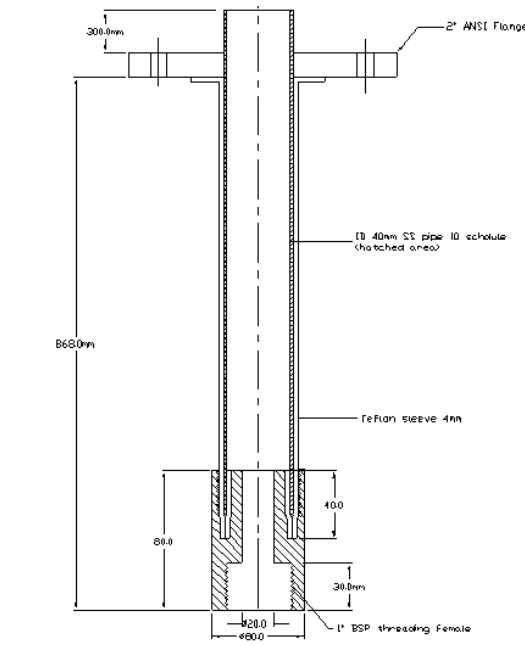
Features:-

- Suitable to large volume of reactors pH measurement.
- SS pipe with 5mm thickness seamless PTFE lined.
- Suitable to most application due to PTFE lining.

Applications:-

- Suitable for glass lined reactor pH measurement.
- Immersion type pH measurement.
- pH measurement for industrial, chemical process application.
- Effluent treatment plants.
- Bulk Drug plants.
- DM plant.

³Suitable to
1" BSP Teflon high alkaline Electrode (with ATC) INP 150E-11



4). **2" Flow through assembly for PP HA electrode⁴ (Model No. INP 150A-12-P-1)**

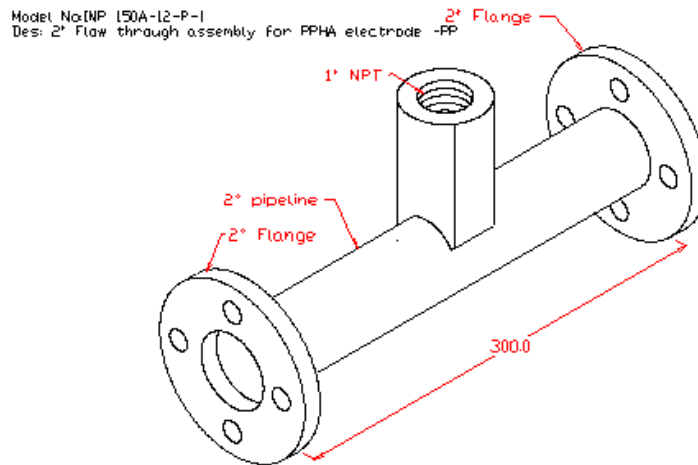
Features:-

- To measure pH in line.
- PP construction.
- Flange end connection is provided.

Applications:-

- In line pH measurements.
- pH measurement for industrial, chemical process application.
- Effluent treatment plants.
- Bulk Drug plants.
- DM plant.

⁴Suitable to
1" PP Flow through high alkaline Electrode
(with ATC) INP 150E-03



5. Side Mounting Type Fermentor SS Bela electrode⁵ (Model No. INP 150A-09-S-5)

Features:-

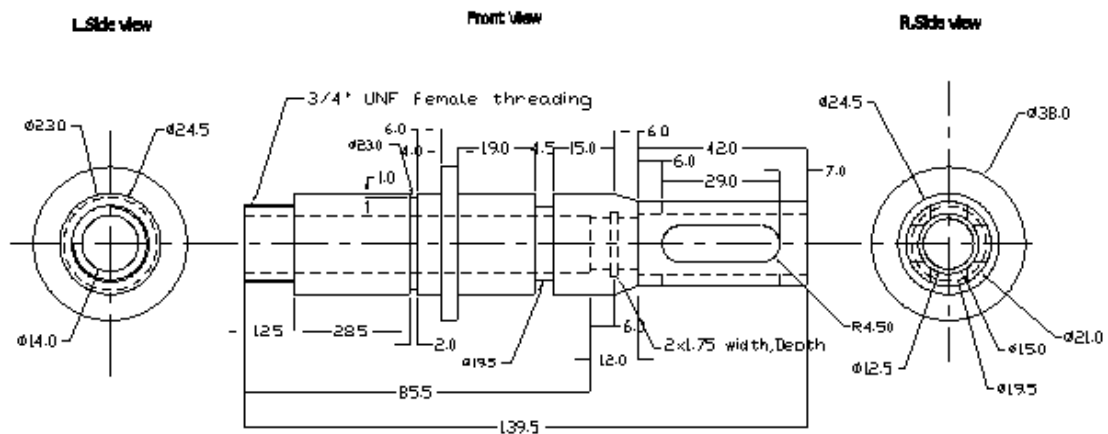
- Suitable to fermentor Fitting.
- SS 316L meets the highest requirement of pharmaceutical industry.

Applications:-

- Sidemount pH measurements.
- pH measurement for industrial, chemical process application.
- Biotechnology applications

⁵ Suitable to Sidemount SS high alkaline electrode Model No. INP 150E-06

Mechanical Drawing:-



Specifications:-

| Model No. | INP 150A-01-S-3 | INP 150A-03-P-3 | INP 150A-11-T-3 | INP 150A-12-P-1 | INP 150A-12-P-1 |
|------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|------------------------|-------------------------------------|
| Application | Immersion | Immersion | Immersion | Flow Through | Fermentor or Sidemount |
| Pipe MOC | SS316L | PP | SS pipe with PTFE lined | PP | SS316L |
| Insertion Depth | Application specific (Max. 9 feet) | | | Pipe Line :2" NB PP | 87mm |
| Dimensions | OD:32mm x ID: 28mm | OD: 50mm x ID: 42mm | OD: 55mm | Assembly Length: 300mm | OD: 25 mm |
| Process Connection | SS Flange suitable to Reactor port * | PP Flange suitable to Reactor port * | SS Flange suitable to Reactor port * | 2" Table E Flange | ----- |
| Electrode Connection | ¾" NPT F | 1" NPTF | 1" BSPF | 1" NPTF | Coupling Dia: 42mm 11 TPI threading |
| Adapter dimension | OD 32mm | OD 50mm | OD 80mm | ----- | OD: 48mm |
| Required port size | OD: 42mm(Min.) | OD: 60mm(Min.) | OD: 90mm(Min.) | ----- | OD: 58mm (Min) |
| Supporting Pipe (OD X ID mm) | ----- | 38 X 35 mm, SS304 | ----- | ----- | ----- |
| End Fitting | ----- | SS Flange suitable to Reactor port * | ----- | ----- | ----- |

* Customer Scope

Ordering Information: -

Refer specifications for model numbers.

For Further Information Contact:

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