

**EP462 Series**  
**pH Sensors - Twist-Lock Mount**



**OVERVIEW**

The EP462 Series is a family of twist-lock style combination pH sensors designed for quick and easy sensor installation and removal. The model codes EP462A and EP462C versions have a choice of low-impedance bulb for pure water applications with conductivity in the range of 1-10  $\mu\text{S}/\text{cm}$ . A choice of process-wetted O-ring material, EPR/Viton or Kalrez, provides greater chemical compatibility. Titanium solution ground and integral temperature compensation are standard.

The twist-lock mounting adapter is available in Kynar or 316 ss, and each is available in either 3/4" or 1" NPT process connection. The mounting adapter also accepts a 316 ss locking cap, for added safety.

For low-conductivity applications, the following items are recommended:

- ▶ EP462A sensor
- ▶ EP463E twist-lock flow chamber<sup>(1)</sup>
- ▶ Optional EP464A locking cap

**FEATURES/BENEFITS**

- ▶ Twist-lock style process connection allows quick and efficient installation and removal of pH sensor.
- ▶ Low-impedance bulb option for low-conductivity process streams, 1-10  $\mu\text{S}/\text{cm}$ .
- ▶ Double junction reference with self-pressurizing electrolyte resists contamination.
- ▶ Kynar twist-lock body with integral bulb guard for tough applications.

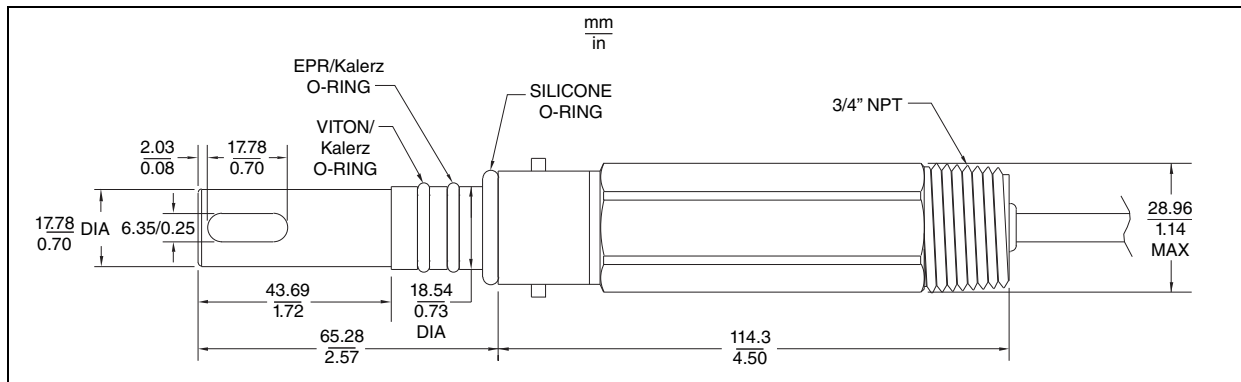
1. EP463E combines the features of EP463C and 0051180 into one, more cost effective, easier to use assembly.

SPECIFICATIONS

pH Range:	0-14 (domed bulb) Part No. EP462B and D 0-12 low-impedance bulb Part No. EP462A and C
Temperature Range:	0-100°C
Pressure Limit:	0-120 psig
Process-Wetted Material:	Kynar Glass EPR/Viton O-rings Part No. EP462A and B Kalrez O-rings Part No. EP462C and D Titanium solution ground
Cable:	20' black PVC jacketed coaxial plus 4-conductor stripped and tinned termination
Temperature Compensation:	3-wire, 100 Ω Pt RTD

DIMENSIONS - NOMINAL

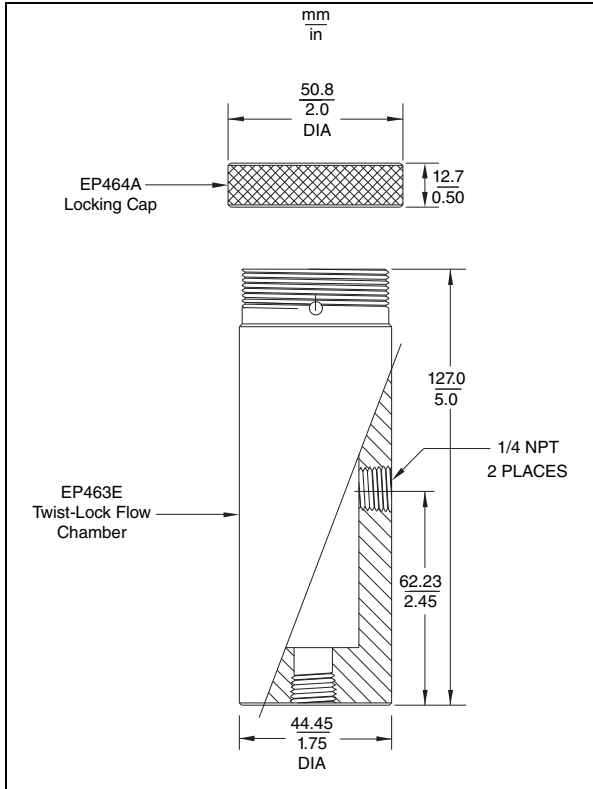
Figure 1. Dimensions of EP462 pH Sensor



NOTE

EP462A and EP462B have EPR and Viton O-rings (one of each). Models EP462C and EP462D have Kalrez O-rings in place of EPR and Viton.

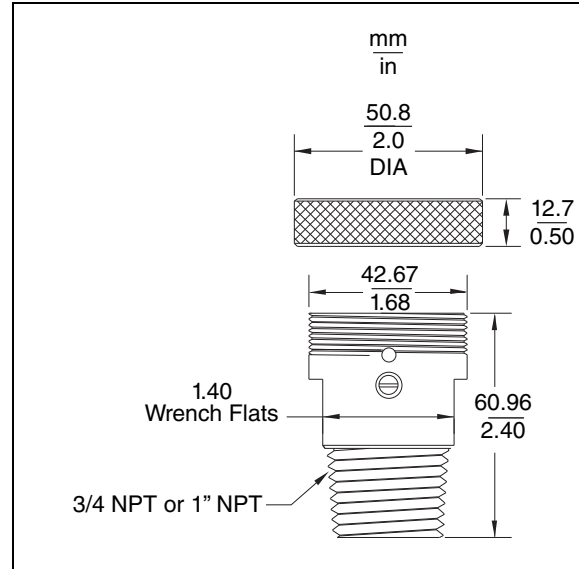
Figure 2. Twist-Lock Flow Chamber and Locking Cap - EP463E and EP464A



**NOTE**

Flow Chamber does not come with Locking Cap. Cap must be ordered separately and is only available in 316 SS.

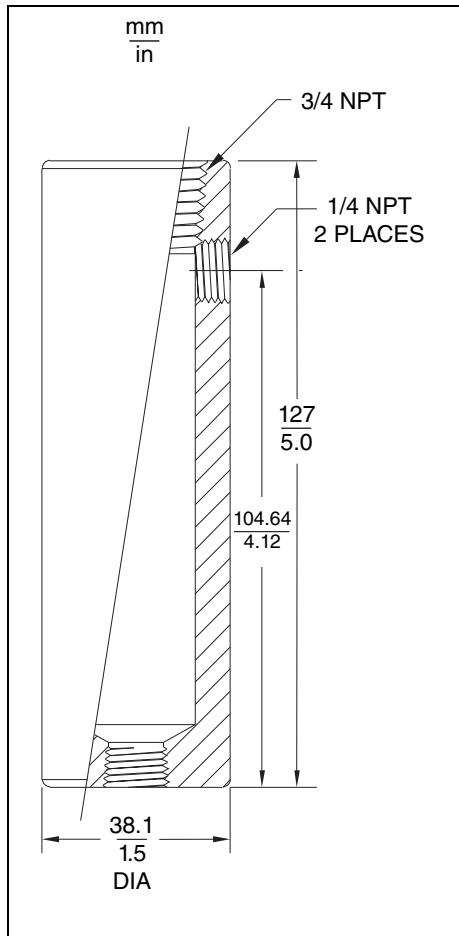
Figure 3. Twist-Lock Adapter with Cap



**NOTE**

Twist-Lock Adapter with Cap available in 316 SS and Kynar materials with 3/4"-14 NPT thread or 1"-11 1/2 NPT thread. See Twist-Lock Mounting Adapter in "ORDERING INFORMATION" on page 8.

Figure 4. Flow Chamber (Part Number 0051180)



**NOTE**

Stainless Steel Flow Chamber for use with any 316 SS or Kynar Twist-Lock Adapters.

NOTES





### ORDERING INFORMATION

Part No.	Description
<b>pH Sensors</b>	
EP462A	Low-conductivity Applications, Low-impedance Bulb, 0-12 pH range, EPR/Viton O-rings
EP462B	Full-range domed bulb, 0-14 pH range, EPR/Viton O-rings
EP462C	Low-conductivity Applications, Low-impedance Bulb, 0-12 pH range, Kalrez O-rings
EP462D	Full-range Domed Bulb, 0-14 pH range, Kalrez O-rings
<b>Twist-Lock Mounting Adapter</b>	
EP463A	Kynar Twist-Lock Adapter, 3/4" NPT
EP463B	Kynar Twist-Lock Adapter, 1" NPT
EP463C	316 SS Twist-Lock Adapter, 3/4" NPT
EP463D	316 SS Twist-Lock Adapter, 1" NPT
<b>Twist-Lock Mounting Adapter Cap</b>	
EP464A	316 SS Locking Cap (non-wetted) for EP463 Series adapter
Flow Chamber 0051180	316 SS Flowcell, with 1/4" FNPT inlet/outlet ports, accepts EP463C adapter, ideal for "low-conductivity" applications
Flow Chamber EP463E	316 SS Flowcell, combining the features of EP463C and 0051180.

### OTHER FOXBORO PRODUCTS

The Foxboro product lines offer a broad range of measurement and instrument products, including solutions for pressure, flow, analytical, temperature, positioning, controlling, and recording. For a list of these offerings, visit our web site at:

[www.fielddevices.foxboro.com](http://www.fielddevices.foxboro.com)