**Model Q46P/R pH/ORP Analyzer**

**Enclosure Dimensions**

**ANALYZER DIMENSIONS (WALL MOUNT SHOWN)**

Material: Polycarbonate  
Ratings: Nema 4X (IP-66)  
V-0 Fire Retardant

![Analyzer Dimensions Diagram]

**JUNCTION BOX**

![Junction Box Diagram]

**ATI-0926**

**ATI-0655**
PIPE MOUNTING

ATI-0927

PANEL MOUNTING DIAGRAM

ATI-0928

SS-Q46P-R, RC (4/15)
**Q25 pH/ORP SENSOR DIMENSIONS**

**CONVERTIBLE SENSOR**

**CONVERTIBLE SENSOR w/CONNECTOR**

**INSPECTION SENSOR**

**SANITARY SENSOR**

<table>
<thead>
<tr>
<th>SENSOR SIZE</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2&quot;</td>
<td>2.75</td>
<td>1.98</td>
</tr>
<tr>
<td></td>
<td>(70.0)</td>
<td>(50.4)</td>
</tr>
<tr>
<td>2&quot;</td>
<td>3.50</td>
<td>2.50</td>
</tr>
<tr>
<td></td>
<td>(88.9)</td>
<td>(63.5)</td>
</tr>
</tbody>
</table>
FLOW SENSOR DIMENSIONS

ATI-0313

pH SENSOR w/o TC - (63-0005)
pH SENSOR w/TC - (63-0013)
ORP SENSOR - (63-0008)

SUBMERSIBLE SENSOR DIMENSIONS

30' AUTO-CLEAN SENSOR ASSEMBLY
pH SENSOR (07-0127), 30' ORP (07-0129)

ATI-0266

pH SENSOR - (63-0009)
ORP SENSOR - (63-0023)
**FLOW "T" INSTALLATION**

1. Max. 150 psi for FLOW "T" operation.

**SEALED pH FLOWCELL ASSY (00-1527)**

Note: Mounting slots will accommodate up to #10-32 screws.

**SENSOR HANDRAIL MOUNTING**

**SENSOR HANDRAIL INSTALLATION**

**ATI-0728**

**ATI-0729**

**SUBMERSIBLE SENSOR MOUNTING OPTIONS**

**STANDARD SUBMERSIBLE**  
(00-0628)

**AUTOCLEAN SUBMERSIBLE**  
(00-0624)
POWER, RELAY, AND OUTPUT CONNECTIONS

Optional Relay Board Wiring

Optional Analog Output Wiring

RELAY WIRING TB4,5,6 DETAIL

ATI-0930, 0932, 0933

ATI-0931
SENSOR CONNECTIONS

CONNECT SHIELD TO T/B Labeled as “Cable Shields” located inside enclosure bottom of transmitter.

IF USING Q3-0029 CABLE, REPLACE (YEL) COND. WITH THE (ORG) CONDUCTOR IN THE SENSOR CABLE.
**SENSOR CONNECTIONS w/JUNCTION BOX**

**Connection Colors**
- **A** = Red
- **B** = Green
- **C** = Yellow or **Orange**
- **D** = **Blue**
- **E** = White
- **F** = Black
- **G** = N/U
- **H** = Both Shields

**Diagram Description**
- Custom 6-Conductor Q25 Sensor Interconnect Cable (31-0097)
- Connect shield to T/Y labeled as "Cable Shields" located inside enclosure bottom of analyzer
- 15' Q25 Sensor Cable (Standard)
- "**Orange**" conductor replaces the yellow conductor if using the (03-0029) cable.

ATI-0726
* 1-1/2" TEE Fitting not supplied with P/N (07-0221). Tee Fitting must be ordered Separately
NOTE: Sensor is not part of (07-0203) insertion assembly
NOTE: Sensor is not part of (07-0223) insertion assembly
LOCK-N-LOAD SENSOR (EXPLODED VIEW)

NOTE: RETAINING NUT, SENSOR HOLDER, LOCK-N-LOAD HOUSING, & END CAP ARE INCLUDED IN PART # (63-0052)

O-RING
(42-0042)
LOCATED INSIDE OF PROBE HOLDER

O-RING
(42-0043)
LOCATED INSIDE OF HOUSING

O-RING
(42-0042)

END CAP
(NOTE: CAP MUST BE SCREWED ON AFTER PROBE HOLDER HAS BEEN INSERTED INTO HOUSING, BUT PRIOR TO BEING SCREWED INTO 2” CROSS)

2” SOCKET

2” SOCKET

TEMPERATURE COMPENSATOR
(63-0051)

2” PVC CROSS FITTING
(63-0050)

RED
BLACK
LOCK-N-LOAD SENSOR (OPERATIONAL DIAGRAMS)

OPERATIONAL POSITION

MAINTENANCE POSITION

ATI-0626
**SENSOR CONNECTION (COMBINATION ELECTRODE)**

### FOR ATI SENSORS LISTED ABOVE CONNECT AS FOLLOWS:

- **Terminal** 1 – Center Clear (Coax)
- 3 – Shield (Coax)
- 7 – Red (Pt100)
- 8 – White and Green or Blue (Pt100)

**NOTES:**
1. Terminals 3 and 8 MUST be connected with jumper wire.

### FOR OTHER COMBINATION ELECTRODES, CONNECT AS FOLLOWS:

- **Terminal** 1 - Glass Electrode
- 3 - Reference Electrode
- 7 - PT100 or PT1000 Temp. Element
- 8 - PT100 or PT1000 Temp Element

**NOTES:**
1. Terminals 3 and 8 MUST be connected with jumper wire.
2. ORP sensors DO NOT HAVE T/C connections.
1) Always mount sensor cleaner within 25 ft. of sensor if possible. Maximum air line distance is 50 ft.

2) Sun shade over monitor is recommended in hot climates.

3) Monitor Handrail Mounting Kit # 00-0930 supplies all hardware listed for mounting monitor.

4) Wall mounting requires customer supplied screws or bolts.

5) Sensor Pipe Mounting Kit # 00-0624 supplies mounting plate with hardware and PVC pipe mounting adaptor.

6) Sensor Pipe Mounting Kit with Rag Shedder # 00-0629 supplies mounting plate with hardware and PVC rag shedder.
NOTE: DC ANALYZER PWR INPUTS INDICATE "+" AND "-" FOR INPUT CONNECTIONS. DO NOT ATTEMPT TO CONNECT AC PWR TO A DC ANALYZER AND VISE VERSA.

NOTE: IF UNITS ARE ORDERED WITHOUT OPTIONAL MOUNTING PLATE w/DISTRIBUTION BOX, THE TRANSMITTER AND Q-BLAST MUST BE WIRED INDIVIDUALLY.