Installation & Maintenance Guide for the PR10-pH

This document is designed to supplement the PR10 instruction manual. It depicts the installation of the pH electrode(s) and the various O-rings required.

1. Before you begin, make sure you have all of the following items: PR10 Holder; Instruction Manual; stainless process adapter; plastic cable relief fitting; stainless electrode adapter; (3) O-rings; and (2) Allen wrenches.

2. Unscrew and remove the sensor tip from the holder.

3. Take the middle sized O-ring (B) of the three that were in the bag with the Instruction Manual.
4. Insert the O-ring inside of the sensor tip as shown in the image, until it seats in the O-ring groove.

5. The photo shows the O-ring properly installed.

6. If you are using a PG13.5 electrode, proceed to Step 15 for complete installation. For Yokogawa Y-Cap electrodes, take the smallest of the (3) O-rings (C) provided in the bag with the Instruction Manual.

7. Place the O-ring on the electrode below the threads of the cable connector as shown in the image.
8. Place the electrode into the tip portion of the holder.

9. Once the electrode is in place it should look like the following.

10. Take the electrode tip and the largest O-ring (A) that is provided in the bag with the Instruction manual, and place it on the protection tip below the threads and next to the knurled finger grip.
11. In order to easily feed the cable thru the holder assembly it is best to use a piece of tape and tape the terminal ends of the cable together.

12. At this point take the taped end of the cable and feed it thru the back end of the metal tube provided in the bag with the manual, as shown in the images here.
13. Once the cable is threaded thru the metal tube attach the cable to the sensor and screw the metal tube and the sensor tip together as seen here.

14. Thread the taped end of the cable thru the PR10 hold assembly. Once the cable is completely threaded thru the holder the sensor tip should be thread back into place. It should look like the image below once the sensor tip is threaded into place.
Proceed to Step 21 to complete assembly.

15. Steps 15 - 20, are for installing a sensor with a PG 13.5 connection into the PR10. You should have the following parts, the electrode, the sensor tip from the PR10 holder and the metal tube provided in the bag with the manual.

*Make sure the o-ring and spacer that are shipped on the sensor (not shown in the top image, and the following installation images) are included in the installation of the sensor.
16. Set aside the metal tube that comes in the bag with the manual it will not be used. You will just be using the sensor tip from the PR10 holder and the electrode with the PG13.5 connection.

17. Slide the electrode into the protection tip and thread the PG13.5 connector in place.

18. Once the electrode it tightened in place, take the largest O-ring (A) that is provided in the bag with the Instruction manual, and place it on the protection tip below the threads and next to the knurled finger grip.
19. In order to easily feed the cable thru the holder assembly it is best to use a piece of tape and tape the terminal ends of the cable together.

20. Attached the cable to the sensor and feed it thru the PR10 holder assembly. Insert the sensor tip, into the PR10 holder assembly thread it sealed.
Locate the metal process connection. There are two different types of threads on the adapter. One side is a 1.25” NPT thread and the other is a Gas straight thread.

The side that contains a bevelled end on the inside has the Gas straight thread (A), where the side that is flushed has the NPT thread (B).

Attached the metal process connection and thread in onto the holder so that the side with the beveled end (A) is flush with the o-ring on the PR10 holder as shown in the images below.

21. Now that the assembly is put together we need to seal the cable end of the holder. To do this you will need the following pieces taken apart.
22. Thread the taped end of the cable thru the squeezing tube portion of the cable strain relief plastic piece. Then thread the taped end of the cable thru the plastic tube portions of the cable strain relief.

23. Thread the two pieces of the cable strain relief together. Thread the cable strain relief into the PR10 holder.

24. The PR10 is now completely assembled and ready for installation.