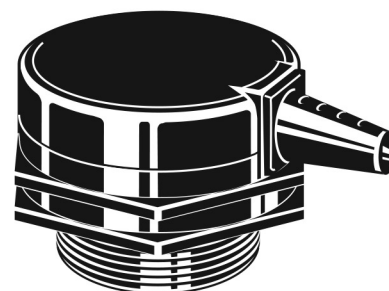




Model AS-5S Ambient Remote Sensor

For LPC-2000 General Purpose
Level Control



Model AS-5S

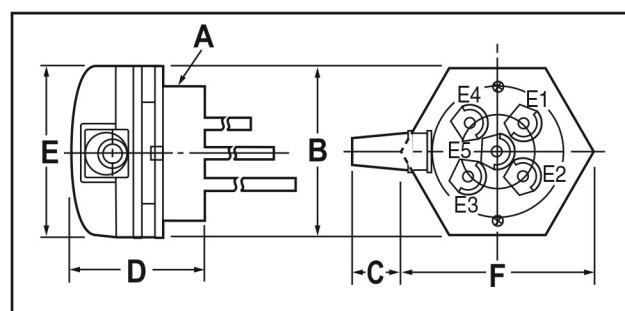
OPERATION

IMPORTANT: This is a NEMA 1 enclosure, which is not designed for outdoor applications.

IMPORTANT: Do not use on high voltage. Use only with Series LPC-2000 control unit.

Maximum Pressure: 0 psi.

Maximum Temperature: 120°F (49°C)



Dimensions, in. (mm)

A	B	C	D	E	F
IS07-RP2	3 ⁵ / ₈ (92)	1 ¹ / ₃₂ (26)	2 ³ / ₈ (60)	3 ⁵ / ₃₂ (80)	3 ⁵ / ₃₂ (80)

WARNING



- Before using this product read and understand instructions.



- Save these instructions for future reference.

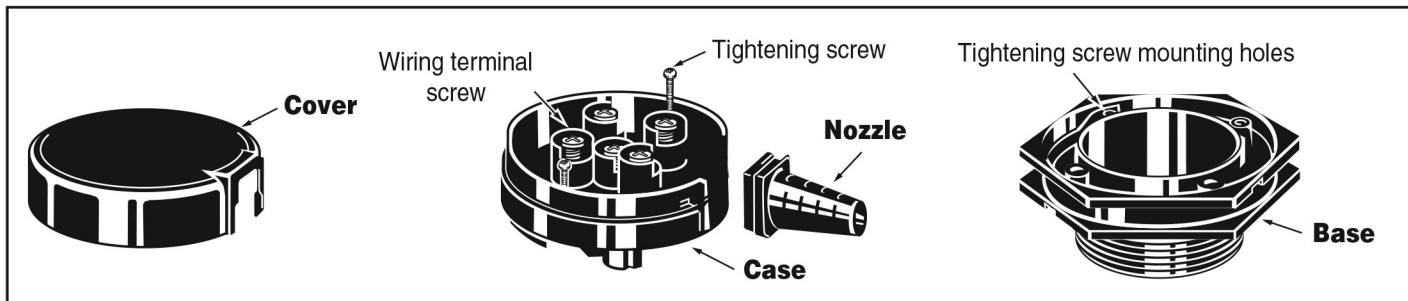


- All work must be performed by qualified personnel trained in the proper application, installation, and maintenance of plumbing steam, hot water, and electrical equipment and/or systems in accordance with all applicable codes and ordinances.

- To prevent electrical shock, turn off the electrical power before making electrical connections.

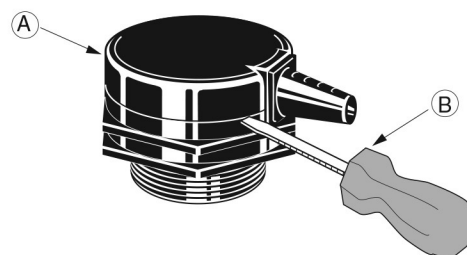
Failure to follow this warning could cause property damage, personal injury or death.

Exploded View

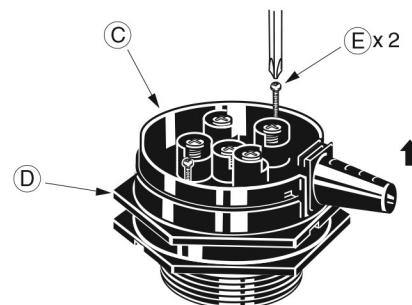


Disassemble the Sensor to Install Probes

- Remove the case cover (A).
- Insert a flat bladed screwdriver (B) into one of the two slots on the cover and twist the screwdriver. Repeat this step on the other slot.



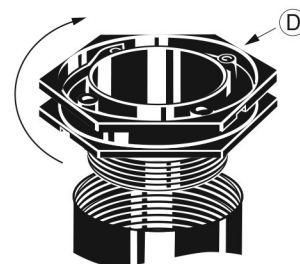
Remove the case (C) from the base (D) by loosening the two screws (E) and lift off.



Mount Base to Tank

Install base (D) on tank and screw hand tight.

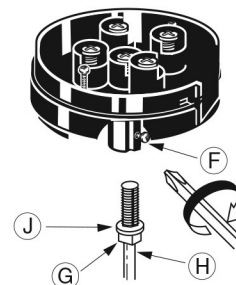
NOTE: The base threads are international standard ISO7-RP2. While the international standard is not identical to the standard National Pipe Thread (NPT) or standard straight 2 inch pipe thread, it is similar. As such a connection with 3 or 4 threads of the base can be made in a 2 inch NPT pipe.



Connect Electrodes to Case

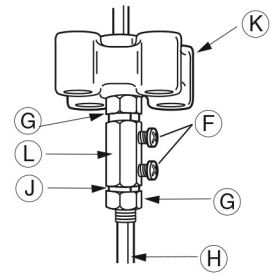
If using more than one electrode, allow space for maximum distance between them.

- Unscrew the case set screw (F). Back it out far enough to allow for electrode insertion.
- Thread the lock nut (G) onto the electrode (H) and place the spring washer (J) on top of the nut.
- Screw this assembly into the case until it stops. Tighten the lock nut (G) until the spring washer (J) becomes flat. Tighten the set screw (F) to 11 lb•in (1.24 N•m). Repeat step for each electrode.



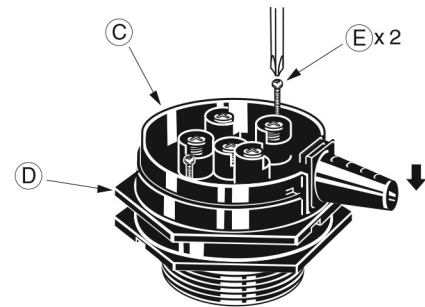
If the required length of the electrode is greater than 39" (1 meter)

- Use an electrode separator (K) (not included) at each joint when joining two electrodes together. This prevents the electrodes from touching each other and false signaling.
- Back out the two set screws (F) far enough so that the electrode (H) clears them. Install a lock nut (G) and spring washer (J) on each electrode. Screw the two electrodes into the connecting nut (L) so that they meet in the middle. Tighten the lock nuts (G). Tighten the two set screws (F).



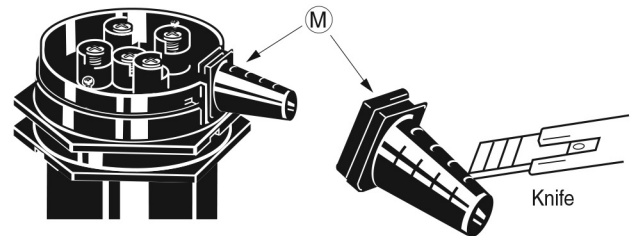
Assemble Case into Base

- Mount the case and electrode assembly (C) into the base (D). Note that there are holes in the base to allow the nozzle to be positioned in 90 degree increments.
- Align the holes and tighten the two screws (E) holding the base and case together.



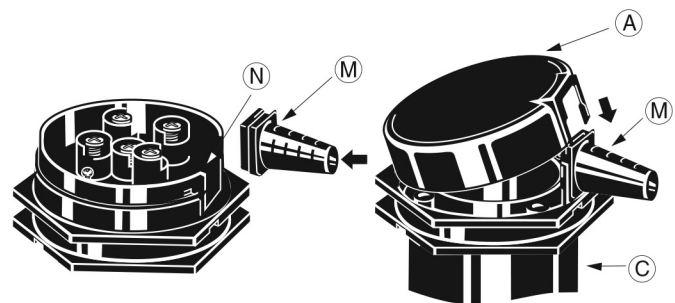
Size the Nozzle

- Determine the opening size needed to accommodate the number and size of wires you have.
- Cut the nozzle (M) as necessary.



Install Wires and Cover

- Pull the wire(s) through the nozzle (M) and place the nozzle into the slot (N) on the case.
- Attach the wire(s) to the appropriate probe terminal. Be sure to insert the wire(s) under the wire clamp and tighten.
- Snap the cover (A) onto the case (C).



Troubleshooting

If the liquid level control fails to operate as required, perform the following diagnostic checks:

- Re-check all wiring to ensure proper connections as specified in these instructions.
- Check to be sure that the fluid level is contacting the probes to initiate the desired level-sensing functions.
- If the tank or vessel is conductive, securely connect a wire to it. Connect the other end of this wire to the ground probe terminal on the Series LPC-2000. If the vessel is not conductive or if you are unable to do this, use a ground probe. It must be longer than any of the other probes.

MAINTENANCE

SCHEDULE:

- **Inspect probe annually for scale build-up and clean if necessary.** Make certain there is no scale or build-up on the probe or its insulator.
- **Replace probe every 10 years.** More frequent replacement of the probe is required if it is used

in locales where significant water treatment is required, where more frequent cleaning is necessary, or in applications with high make-up water requirements.

- **Replace the control unit every 15 years.**

COMMERCIAL WARRANTY

Warranty. For goods sold to commercial buyers, Seller warrants the goods sold to Buyer hereunder (with the exception of membranes, seals, gaskets, elastomer materials, coatings and other "wear parts" or consumables all of which are not warranted except as otherwise provided in the quotation or sales form) will be (i) be built in accordance with the specifications referred to in the quotation or sales form, if such specifications are expressly made a part of this Agreement, and (ii) free from defects in material and workmanship for a period of one (1) year from the date of installation or two (2) years from the date of manufacture, whichever shall occur first, unless a longer period is specified in the product documentation (the "Warranty").

Except as otherwise required by law, Seller shall, at its option and at no cost to Buyer, either repair or replace any product which fails to conform with the Warranty provided Buyer gives written notice to Seller of any defects in material or workmanship within ten (10) days of the date when any defects or non-conformance are first manifest. Under either repair or replacement option, Seller shall not be obligated to remove or pay for the removal of the defective product or install or pay for the installation of the replaced or repaired product and Buyer shall be responsible for all other costs, including, but not limited to, service costs, shipping fees and expenses. Seller shall have sole discretion as to the method or means of repair or replacement. Buyer's failure to comply with Seller's repair or replacement directions shall terminate Seller's obligations under this Warranty and render the Warranty void. Any parts repaired or replaced under the Warranty are warranted only for the balance of the warranty period on the parts that were repaired or replaced. Seller shall have no warranty obligations to Buyer with respect to any product or parts of a product that have been: (a) repaired by third parties other than Seller or without Seller's written approval; (b) subject to misuse, misapplication, neglect, alteration, accident, or physical damage; (c) used in a manner contrary to Seller's instructions for installation, operation and maintenance; (d) damaged from ordinary wear and tear, corrosion, or chemical attack; (e) damaged due to abnormal conditions, vibration, failure to properly prime, or operation without flow; (f) damaged due to a defective power supply or improper electrical protection; or (g) damaged resulting from the use of accessory equipment not sold or approved by Seller. In any case of products not manufactured by Seller, there is no warranty from Seller; however, Seller will extend to Buyer any warranty received from Seller's supplier of such products.

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Warranty. For goods sold for personal, family or household purposes, Seller warrants the goods purchased hereunder (with the exception of membranes, seals, gaskets, elastomer materials, coatings and other "wear parts" or consumables all of which are not warranted except as otherwise provided in the quotation or sales form) will be free from defects in material and workmanship for a period of one (1) year from the date of installation or two (2) years from the product date code, whichever shall occur first, unless a longer period is provided by law or is specified in the product documentation (the "Warranty").

Except as otherwise required by law, Seller shall, at its option and at no cost to Buyer, either repair or replace any product which fails to conform with the Warranty provided Buyer gives written notice to Seller of any defects in material or workmanship within ten (10) days of the date when any defects or non-conformance are first manifest. Under either repair or replacement option, Seller shall not be obligated to remove or pay for the removal of the defective product or install or pay for the installation of the replaced or repaired product and Buyer shall be responsible for all other costs, including, but not limited to, service costs, shipping fees and expenses. Seller shall have sole discretion as to the method or means of repair or replacement. Buyer's failure to comply with Seller's repair or replacement directions shall terminate Seller's obligations under this Warranty and render this Warranty void. Any parts repaired or replaced under the Warranty are warranted only for the balance of the warranty period on the parts that were repaired or replaced. The Warranty is conditioned on Buyer giving written notice to Seller of any defects in material or workmanship of warranted goods within ten (10) days of the date when any defects are first manifest.

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Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

To make a warranty claim, check first with the dealer from whom you purchased the product or call +1-847-966-3700 for the name and location of the nearest dealer providing warranty service.

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