

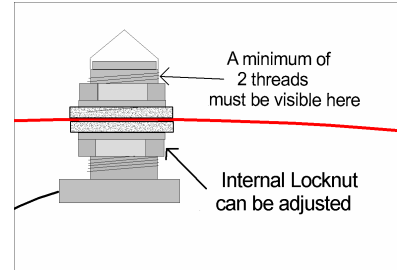
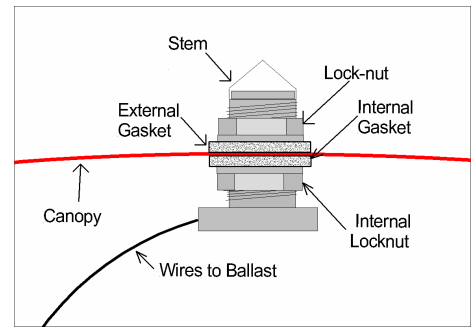
Fitting the SELC 2000 Sensor Head using an Internal Locknut

Some customers who do not require an IP67 sealing rating on the sensor head opt for using an internal Locknut instead of the internal gaskets. This method will give an IP64 rating on the head although IP65 can be achieved if installed correctly. Outlined below is the suggested fitting method for this head.

- 1) Decide where on the canopy the SELC 2000 sensor head is to be positioned. The sensor head should be facing upwards when installed. The area where the sensor head is to be positioned should be flat and smooth on both sides. Drill a 20mm hole in the Canopy.
- 2) Place the Internal Locknut and Internal gaskets on the stem and push the stem through the hole in the canopy.
- 3) Place the External gasket on to the stem
- 4) Whilst holding the base of the Sensor head screw the locknut onto the stem and tighten securely. The locknut should be tightened to a torque of approximately 2 foot/lb (See torque section below)
- 5) If the sensor head is protruding through the canopy to far then the internal Locknut can be adjusted to reduce the amount of protrusion. Conversely the sensor head can be made protrude further by adjusting the Locknut further down the stem.

NOTE: Enough of the sensor head must be protruding so as at least 2 threads on the stem can be seen. This is to prevent water from forming pools in the top of the Lock nut.

- 6) Each different type of luminaire into which an SELC 2000 is fitted **MUST** be checked to ensure a good seal is made. The first luminaire when fitted with the SELC 2000 should be checked at the factory. A simple test is outlined below. If the seal is good and a consistent installation process is implemented there should never be a problem with the seal.



TORQUE

In the fitting instructions above you are required to apply 2 foot/lbs of torque to the lock nut to achieve a good seal. This is best done with a torque wrench, however if a torque wrench is unavailable the following may be useful:

Whilst holding the Internal Locknut hand-tighten the external locknut fully. Then using a spanner tighten the nut 1¼ more turns. This approximates to 2 foot/lb torque however this is only a very rough guide.

Installation into a 'Ribbed' Luminaire

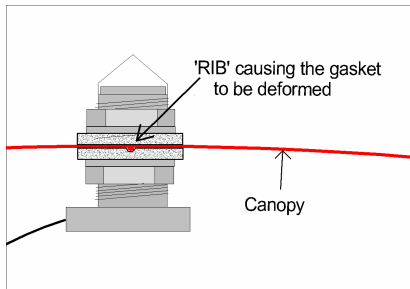
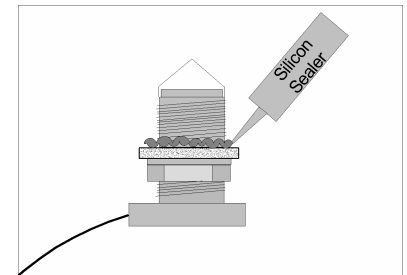


FIG 3

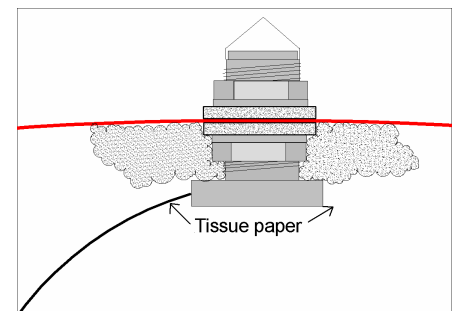
Some luminaires have 'ribs' on them running radially from the hole where the stem is to be inserted. These 'ribs' are problematic for achieving a correct seal on the SELC 2000 stem. As can be seen from fig 3 over when the stem is tightened the internal gasket is deformed slightly and can not form an exact seal around the rib. It is recommended that a layer of silicon sealer be applied to the top of the internal gasket before the stem is pushed through the luminaire canopy. The installation can then continue as described above. When the lock nut is tightened a good seal will be formed around the rib by the silicon.



Testing the Seal on the Sensor Head

Every time a SELC 2000 is being installed into a new type of luminaire for the first time the seal on the Sensor head **MUST** be checked to ensure a good seal can be achieved. To carry out a simple and quick test on the sensor head do the following:

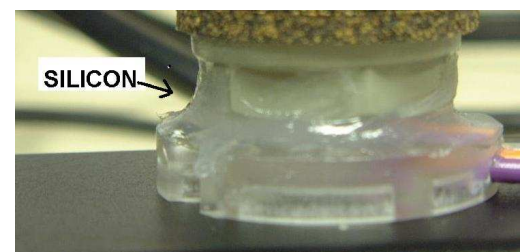
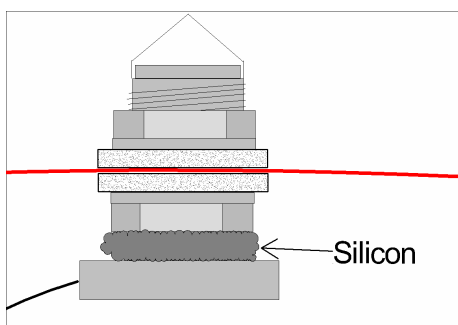
- 1) Fit the sensor as described above.
- 2) Once satisfied that the sensor is correctly located and tightened stuff some tissue paper around the internal gasket and Locknut between the sensor head housing and the canopy. Ensure the tissue paper is tightly pressed against the gasket as shown.
- 3) Close and seal the luminaire. Take the luminaire outside and using a water hose with strong pressure (Not a Power Hose!) aim the stream of water directly at the sensor head. Try to get the stream of water to hit the sensor head from all angles including straight down from above. Do this for approx 10 Minutes.
- 4) Dry off the outside of the luminaire. Open it up and remove the tissue paper. If the seal is good the tissue should be only very slightly wet for an IP64 rating. If the tissue has any more than a couple of drops of water on it then you will need to start the entire process from the beginning until a good seal is achieved. Once a good seal is achieved ensure that all installations are carried out in the exact same manner to ensure a consistency of seal. An installation Instruction should be made up and a copy given to each installer to ensure that the seal is consistent.



Increasing the IP Rating

As already mentioned an IP64 Rating can be easily achieved using the above method. However if it is decided at any stage that a higher IP rating is needed in the luminaire then there are 2 options.

- 1) Remove the Internal Locknut and insert gaskets only as described in the SELC 2000 HID SMART BALLAST FITTING INSRUCTIONS. This is the recommended option.
- 2) The second option is to seal around the Internal Locknut and Sensor Stem base with a silicon sealer as shown. This is probably the easier method if retrofitting in the field.



Both of the above options will give an IP67 rated seal if done correctly.