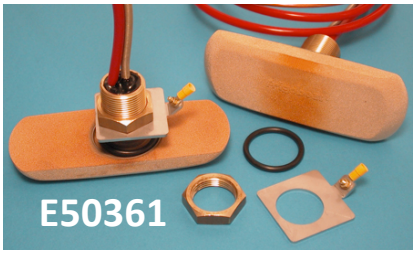
Which Keel Cooler?

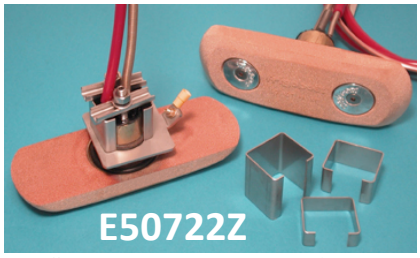
Frigoboat offers two styles of Keel Cooler, “Studs” and “Threads” that differ only in the manner in which they are secured inside the hull. Each type can be ordered with or without sacrificial zincs and are constructed of galvanically compatible sintered bronze, brass, and cupro-nickel.

“Threads” Model – E50361 and E50361Z



The “**Threads**” model is very similar to a regular through-hull fitting in that it has a threaded, tubular, 1½” diameter shaft that passes through the hull. A nut is threaded onto the shaft and tightened down. This requires a large wrench and enough clearance for the wrench to swing through. It also requires a helper to restrain the Keel Cooler from rotating on the outside of the boat as the nut is being tightened inside. The “Threads” model is a popular choice for boat builders and boat yards that have the necessary tools and manpower.

“Studs” Model – E50722 and E50722Z



The “**Studs**” model is identical to the “**Threads**” model on the outside of the hull, and also has a shaft that requires a 1½” diameter hole. There are no threads on the shaft of the “**Studs**” model, instead there are two threaded studs that protrude through the top. In the fixing kit there are four different sized collars to accommodate differing thickness of hulls, and the appropriate one is slipped around the shaft. Then two metal bars are dropped down onto the studs followed by washers and then nuts. These two nuts are then carefully tightened using a ½” socket that tightens from above, hence no swinging room is need for a wrench, as in the “**Threads**” model. No help is needed for the installation of the “**Studs**” model as it will not rotate as the nuts are being tightened, and this feature makes the **“Studs”** model a good choice for owner installations and one-man installers. Once installed, there is no difference in strength or integrity between the “Studs” and “Threads” models, and the phenomenal bonding power of modern sealants ensures peace of mind, whichever model is installed.

Zincs or no Zincs?

Both the “**Threads**” and “**Studs**” versions of Keel Coolers are available with or without sacrificial zincs, and a “Z” is added to the Part Number of the model with zincs to distinguish between the two. In the “Z” models there are two, circular zincs that are recessed into the bottom of the Keel Cooler, flush with the surface, and these do not affect performance. It is a requirement of the installation that an electrical connection is made between the Keel Cooler and the battery negative. In satisfying this requirement, the Keel Cooler is often connected electrically to the boats’ sacrificial zinc that is protecting the other underwater metal fittings. If this is found to be the case, a Keel Cooler with zincs is not necessary. If a “Z” model is used in a situation where zincs are not required, it may result in excessive zinc loss from the Keel Cooler zincs, as these will tend to take over the job previously performed by the boats’ zinc.

If the boat does not have a bonding system and/or employs non-metallic underwater fittings it would be advisable to use a Keel Cooler with zincs as a safety precaution. Ultimately the choice of whether to use a Keel Cooler with or without zincs rests with the purchaser. If in doubt, consult a marine corrosion specialist.

New – “Bare Bones” Keel Cooler

This is a threads model without zincs and with no sintered bronze, resulting in a significant cost reduction over the sintered ground plate models. Exposed cupro nickel condensing tube is secured by a plastic restrainer, and components are faired to provide smooth water flow and maximum protection.