## How to cut to prevent fraying ...



## What is a Hot Knife?

A hot knife is a tool with a narrow metal strip that is heated to a temperature sufficiently high to melt the polymer filaments of most types of braided sleeving. This melting not only cuts the sleeving to the desired length, but also fuses the loose ends of the filaments together to prevent fraying of the cut end during installation and use. A hot knife speeds production by alowing you to cut all of your sleeving in advance, and then install the precut lengths at your leisure without any concerns that the material will fray or unravel.

Typically, hot knives have a blade connected to 2 poles of an encased transformer. When a current passes through the blade, resistance causes it to heat to the desired temperature. Hot knives that are designed for field use when no source of electricity is available are usually lower temperature devices powered by a butane flame that heats the blade and allows it to cut and seal the material.

## Setting up your hot knife for the first time

When you receive your new hot knife, mount the blade to the posts and tighten. When the knife is turned on for the first time, there may be some smoking while the manufacturing oils burn off. Leave the knife on for about 20 minutes and turn it off. After it cools, check the tightening screws on the posts and retighten if necessary. Your knife is now ready to provide years of trouble free service. Check the tightening screws periodically to ensure good contact with the posts.

Hot Knives should always be used in a well ventilated area to avoid inhalation of the fumes.



Measure the sleeving to length. Keep the sleeving relaxed and don't pull it as you measure. The most accurate method is to measure the sleeving on the actual application. There will be some foreshortening of the sleeving as it expands over large bundles or connectors. Mark the cut line with a pen or marker.

While the ends are still hot, use an inverted funnel (needle nose pliers or scissors also work well) to form the end into a soft flare. This will allow the sleeving to easily slide over your application and accommodate plugs or connectors without binding.





When the knife is hot, slide the sleeving over the cutting blade. Practice on a piece of scrap to get a feel for the procedure. Always cut in a well ventilated area and avoid inhaling the fumes. Both the blade and the cut ends will be HOT. Be careful.

To install the sleeving over your application, just push the flared end over the ends of the wires and "walk" the sleeve down the length of the bundle from behind. Once the sleeving is in place, just run your hand over the applied sleeving to smooth it out.





Handheld Hot Knife Hand Held Hot Knife - HKH0.00BK Replacement Knife Blade - RBH0.00SV



Heavy Duty Hot Knife
Heavy Duty HK 110 volt - GK50.00BE
Heavy Duty HK 220 volt - GK60.00BE



Heavy Duty Handheld Hot Knife
HD Handheld Knife 110 volt - GK10.00GN
HD Handheld Knife 220 volt - GK20.00GN



Compact Hot Knife
Compact HK 110 volt - GK30.00BE
Compact HK 220 volt - GK40.00BE



Bench Mount Hot Knife
Bench Mount Hot Knife - HKB0.00WH
Replacement Knife Blade - RBB0.00SV