

SUMMARY

Gentle Handling:

Handle LSZH Cat6 cables carefully due to their flexible but less rugged nature compared to PVC cables.

Proper Stripping:

Use appropriate tools to strip the LSZH jacket without damaging inner components. Precision is essential to avoid conductor damage.

Bend Radius:

Adhere to the specified bending radius to prevent cable damage. DINTEK recommends 8 x cable diameter minimum for LSZH cable.

Careful Pulling Techniques:

Employ smooth, steady pulling techniques without sudden jerks. Sudden force can stretch the cable beyond its tolerance, affecting performance and safety features. Avoid Sharp Bends which can also damage jackets when pulling cables.



LSZH CABLE HOW TO INSTALL

DINTEK Best Practice For Installation

LSZH Cable represents a significant advancement in cable technology.



DINTEK
LAN CABLING SYSTEMS



LSZH



Dca Level



Low Smoke

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01 What's it made of & why is LSZH So different to PVC jackets

DINTEK LSZH cables are made from thermoplastic compounds that do not contain halogens. These compounds include materials like polyolefins (such as polyethylene or polypropylene) and various polymers.

LSZH materials are engineered for fire safety. They are formulated to emit very low smoke and non-toxic halogen gases when exposed to fire.

PVC cables are made from a thermoplastic polymer called polyvinyl chloride. PVC is known for its flexibility and cost effectiveness.

However, while PVC is a versatile material it lacks the fire safety features of LSZH. When PVC burns, it emits dense black smoke and toxic, acidic gases which can cause fatalities.

Many countries now insist that all internal cabling be LSZH jacketed.

02 ARE THERE PHYSICAL DIFFERENCES

DINTEK LSZH materials are processed with advanced extrusion techniques, allowing us to create thinner and softer jackets without compromising safety standards.

The manufacturing process for LSZH cables focuses on achieving specific fire safety ratings while maintaining flexibility. This process can result in thinner and softer jackets compared to PVC.

PVC is naturally flexible, making it easier to handle and install. However, it is thicker and stiffer than LSZH materials. PVC cables might have a thicker jacket to provide additional protection and insulation, especially in harsh environments.

The thickness and flexibility of LSZH jackets are designed to comply with specific safety standards, ensuring minimal smoke and toxic gas emissions during a fire. Meeting these standards often involves optimizing the material composition and manufacturing process for thinner and softer jackets.

03 HOW TO INSTALL LSZH JACKETED CABLES

Handling & Storage: Handle LSZH cables with care. While they are flexible, they may be less rugged than PVC cables, so avoid excessive bending or twisting. Store LSZH cables in a dry, cool environment away from direct sunlight.

Bend Radius: While LSZH cables are flexible, they have specific bending radius recommendations to prevent kinking and damage to the cable. Avoid tight bends and use velcro ties if possible. If using plastic cable ties, use wide ties, and keep them loose so they do not crush the jacket.

Pulling Tension : All twisted pair cables should not be pulled with tension above 110N/mtr. While PVC can be more forgiving excessive pulling around corners etc, can cause damage to LSZH cable jackets.

Remember, if you have pulled a cable with so much tension that it tears a jacket, then you will have damaged the internal structure of the cable... whether it is LSZH or PVC jacket.

