

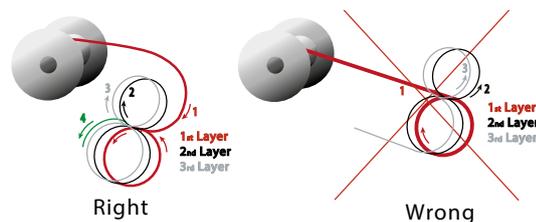
LSZH

Installation of LSZH sheathed cables

In general, there is no difference between the installation of cables with PVC and LSZH sheaths, except that the strict observance of the installation temperature is of great importance. The permissible temperature range for installation must be complied with at all times. The specified value ($-5\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$) applies to the cable temperature and not to the ambient temperature. During the installation process at temperatures of $+50\text{ }^{\circ}\text{C}$ and above, LSZH sheathed cables are more sensitive to cracks and other damage caused by mechanical stress. The risk of damage occurring during the installation process rises with the temperature.

Mechanical stress can be caused by:

- alling below the permissible bending radius.
- mechanical influences (pressure on the outer sheath) at crossing points: the armour wires of one or two cables crossing each other generate a point of high pressure at this place (figure of eight), so it is important to lay the cable in a figure of eight in the correct way.



- cables damaged beforehand due to the pulling process.
- rough handling of the cables during the pulling process (for example pulling cables over edges).
- torsion of the cable in the "wrong" direction ("opening of armour wires"): it is important that the cables are FIRST turned in such a way that the armouring becomes tighter. If they are first turned in such a way that the armour wires "open" or if this is done too frequently, stress is applied to the outer sheath, causing the outer sheath to open at high temperatures.

In comparison with PVC, LSZH material has a very low tear resistance, so once a cable is damaged, the crack will split further. **Conclusion:** With LSZH sheathed cables, it is very important to comply with the permissible installation temperature range and the cable temperature (not the ambient temperature) at all times.

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