



Application Note

Fiber SMA Connectors

Keywords

Connectors, Fiber optic, SMA, Type 905, Type 906

Summary

Type 905 and Type 906 SMA (e.g. Amp FSMA) connectors shall not be mixed; they are incompatible with the opposite type. Additionally, the Type 906 requires one of two ferrule sleeves, depending on the application.

Scenario

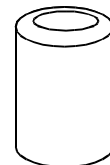
Customer purchased two sets of cable assemblies: one with Type 905 connectors, the other with Type 906 connectors. The customer complained about intermittent links, while using the cables.

Question

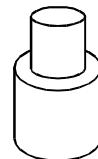
What connectors should he use with the old equipment, which exists in a reclaimed facility?

Notes/Answer

The two, connector types do not work with each other. The Type 905 connector *looks* like a normal FC connector, except it has a stainless steel ferrule. The Type 906 connector is similar, except for two ferrule features. The 906's ferrule diameter is slightly smaller, and it has a step cut at the end of the ferrule (see diagrams).

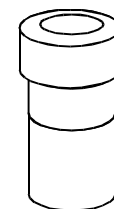


Type 905

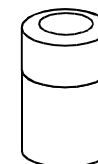


Type 906

The Type 906 connector uses two "ferrule sleeves," depending on the application. If the connector will be attached to another cable assembly, using an adapter, then the full sleeve must be used. The full sleeve has a larger diameter section, which locates the connected ferrules inside the adapter. Without this sleeve, fiber misalignment will occur.



Type 906
with
Full Sleeve



Type 906
with
Half Sleeve

The half sleeve is used when the Type 906 connector is mated to a transmitter or receiver.

Note: Amp suggests, that the Type 905 connector be used, unless a Type 906 is already used.