

ABSTRACT

COMMUNICATIONS CABLE AND METHOD OF MAKING SAME

A communications cable and method for making same wherein a communications cable is able to withstand significantly higher thermal temperatures than conventional fiber - whether it be general purpose, or rated as Plenum / Riser rating, or even MIL Spec type cables. A core fiber glass material with at least an 800 Fahrenheit degree operating ability allows the communications cable to survive in high heat or stress conditions. A polyimide coating on the outside of the fiber is a high temperature material and lends to this high operating temperature capability. By containing and protecting an optical pair of these fibers or even up to 4 glass fibers within a silicone rubber 1 mm diameter buffer tube, thermal protection of the high temperature glass within is increased. A single buffer tube type product and market that as a mini solution for fiber optic requirements within equipment or we individually or group wise mechanically protect these buffer tubes. The choice and decision to apply 2 layers of opposing woven aramid / KEVLAR™ fibers now begins to apply a enhance tensile strength capability resulting in significant increase of currently available fiber optic cables. Once this mechanical protection layer has been applied a second, but thicker layer of silicone rubber is applied as an outer protection jacket either over the single paired Duplex Cable or the 24 Pair or larger cable design.

Figure 1