

OPTICAL CABLE

ABSTRACT

An optical cable is provided, including an outer sheath (100), a main optical fiber, (200), and at least two strength members (300). The main optical fiber (200) and the strength members (300) are all located inside the outer sheath (100). In addition, the main optical fiber (200) and the strength members (300) have a same extension direction. At least two strength members (300) are spaced apart on an outer periphery of the main optical fiber (200), and at least one strength member (300) is an auxiliary optical fiber. At least one strength member (300) on a side of the main optical fiber (200) is arranged as an auxiliary optical fiber. In this way, the auxiliary optical fiber that serves as the strength member (300) can improve a tensile capacity of the entire optical cable, to protect the main optical fiber (200) from being damaged under an external force. In addition, the auxiliary optical fiber may also be configured to transmit an optical signal. After the main optical fiber (200) is damaged, without replacing the whole optical cable, the auxiliary optical fiber is directly fusion spliced, and the auxiliary optical fiber is used for signal transmission. This ensures normal use of the optical cable, facilitates maintenance of the optical cable, and reduces maintenance costs.

(Fig.1)