

ABSTRACT

A bundled submarine cable and a manufacturing method thereof, where the bundled submarine cable (100) includes a protective layer (10) and at least three groups of three-core return circuits (30) disposed in the protective layer, each group of three-core return circuits uses different twisting intercepts, and the three-core return circuits are symmetrically disposed on an inner side of the protective layer. A plurality of three-core return circuits of the bundled submarine cable are integrated into a submarine cable, which meets the requirements for power transmission at different frequencies and different powers of multiple electric submersible pumps for an underwater production system or multiple generator sets for offshore new energy development; and a whole cable is formed by using different twisting intercepts among the three-core return circuits, so that crosstalk among wire cores is greatly reduced, and the operation safety of a terminal device is improved.

Fig. 1