Sirocco Tubes (External) – Aerial Assembly

Prysmian Part Numbers: contact Prysmian

Blown fibre tubing options for aerial applications, from access distribution to end-customer drops.

Traditionally, aerial cable solutions are preferred where the cost of underground installation is high e.g. rocky terrain or in built-up areas where access difficulties and re-instatement costs can be prohibitive. With the advent of optical technology, new lines of communication were opened up with the possibility of locating aerial cables on power lines.

Prysmian manufactures a wide range of optical cables for power line and telecom applications ranging from OPGW and OPPC (optical element inside a power conductor), ADSS (self-supporting), wrap and lashed cables (attached to a conductor or separate messenger wire) and Fig-8 (containing its own messenger wire). The choice, and the most suitable design within the range, is dictated by the application and the environment.

Prysmian similarly offers a wide range of options of blown fibre tubing assemblies for aerial application, determined by the application and the environment.

• Fig-8 designs incorporating a stranded steel wire catenary which provides the support mechanism for the cable and reduces the impact of any wind and ice loading. Care needs to be taken to avoid wind-induced galloping due to the shape of the cable. An attractive option because the clamping at tension and suspension points is on the messenger wire rather than the tubes (which could result in tube deformation under adverse conditions if not correctly applied).

• Self –supporting designs have the benefit of being circular in shape and minimise the visual impact of an aerial installation. Care is required in choosing appropriate fittings to avoid tube crushing. Single tube designs meeting stringent strength and break performance limits are increasingly being used for customer drops in Fibre-to-the-Home schemes.

• Standard tubing designs can be easily lashed, using traditional methods, to a catenary wire. There are simple mechanised methods to attach the lashing wires. This approach also reduces the risk of damage to tubes by over clamping. By using the same cable for underground and aerial sections, the cost of stockholding / inventory will be minimised.

There is no single optimised solution, since this will depend on the specific application and environment. A full assessment of the line conditions is recommended in order to select the most appropriate blown tube aerial assembly.

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