MINERAL INSULATED (MI) SERIES CONSTANT WATT TECHNOLOGY

INTRODUCTION

SANTO MI heating systems provide the optimum solution when power outputs and/or temperatures exceed the limits of any polymeric heating cables.

Operating to voltages up to 600 V

Temperature maintenance up to 600°C

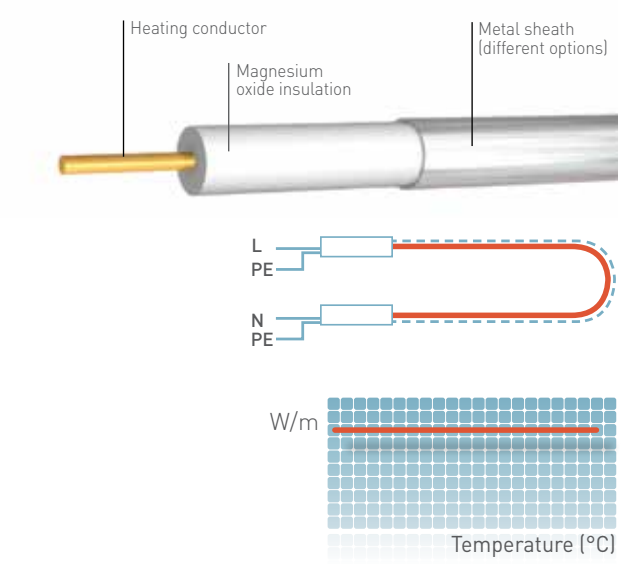
Exposure temperatures up to 1000°C

Circuit lengths up to several kilometres

CONSTRUCTION

SANTO MI heating cables consist of one (single core) or two (dual core) conductors embedded in a highly dielectric magnesium oxide insulation surrounded by a seamless metal sheath. The cables are terminated at the extremities with a non-heating section and seal.

Heating elements are manufactured by brazing the heating cable with a cold lead, either on-site or at the factory.



HOW IT WORKS

Heat is generated in the conductor(s) through the principle of Ohmic resistance heating (Joule effect). A variety of central conductor materials is used, depending on the specific resistance requirements.

Power output and temperatures of a MI series heating system depend on the specific application. Design parameters including type/resistance used, circuit length, applied voltage and electrical configuration directly influence the performance of the heating system. Design and product selection has to be carried out by qualified personnel using appropriate software. Any change to these parameters can be critical and require a re-validation of the design.