One-Trace

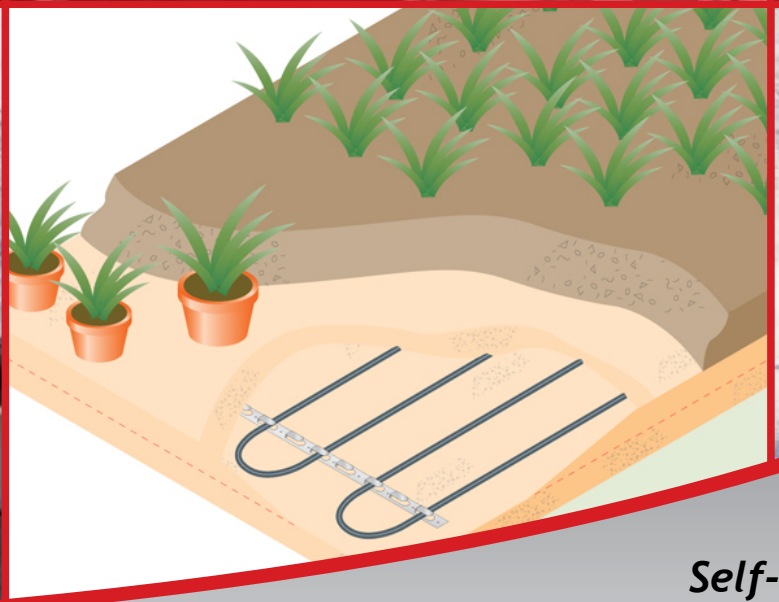
Datasheet & Application Guide













Self-Regulating Professional Product
for surface heating applications

HEAT TRACE

The Heat Tracing Authority™

Self Regulating professional product for surface heating applications.

DESCRIPTION

ONETRACE-i is a light industrial/commercial grade self-regulating heating cable that can be used for freeze protection or temperature maintenance of several pipework and surface applications in the industrial and commercial industries.

ONETRACE-i ensures the conductor to matrix contact improves with age. Benefits include longer life expectancy, minimum power loss and improved efficiency.

Its self-regulating characteristics improve safety and reliability. ONETRACE-i will not overheat or burnout, even when overlapped upon itself. Its power output is self-regulated in response to the pipe temperature. ONETRACE-i can even be installed on plastic applications and with the UV resistant outer jacket, the heating cable is protected from the sun's harmful rays - thus making it totally durable and reliable.

ONETRACE-i can be cut-to-length on location and precise lengths required by the application can be matched without any complicated design considerations. With the correct technique it can even be installed on plastic pipework and applications. The installation is quick and simple and requires no special skills or tools. Termination, splicing and power connection components are all provided in convenient kits.

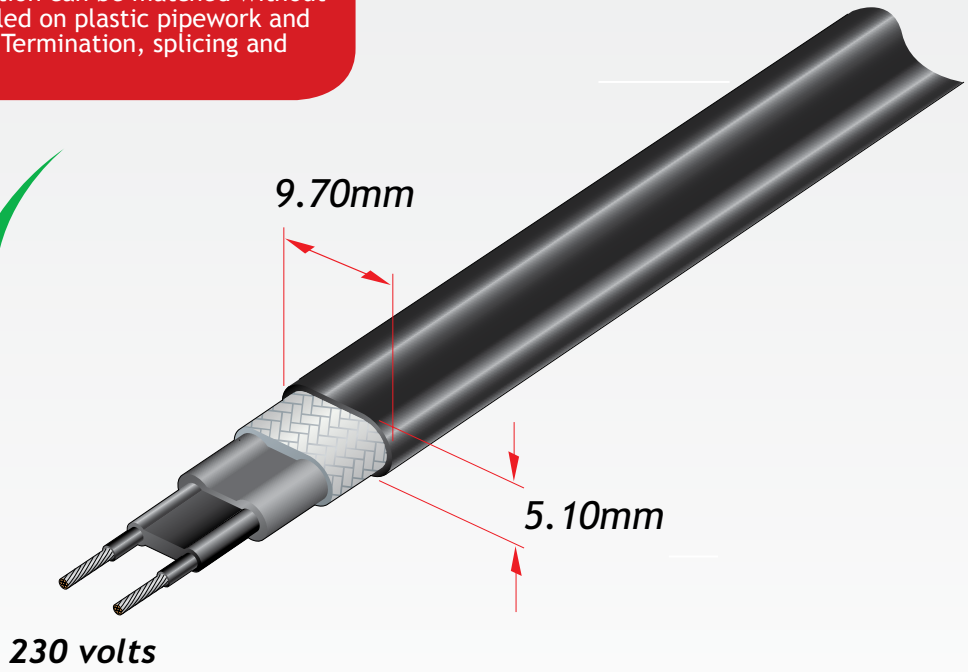
KEY FEATURES

- Integrated conductors, conductor to matrix contact improves with age
- Longer life expectancy.
- Can be cut-to-length.
- Cable jacket is UV resistant.
- For 220v-250v AC/DC use









INHERENTLY TEMPERATURE-SAFE

" The inherent ability to self-regulate at a temperature level below the maximum product rating and withstand temperature of the insulating materials, without the need for temperature control."

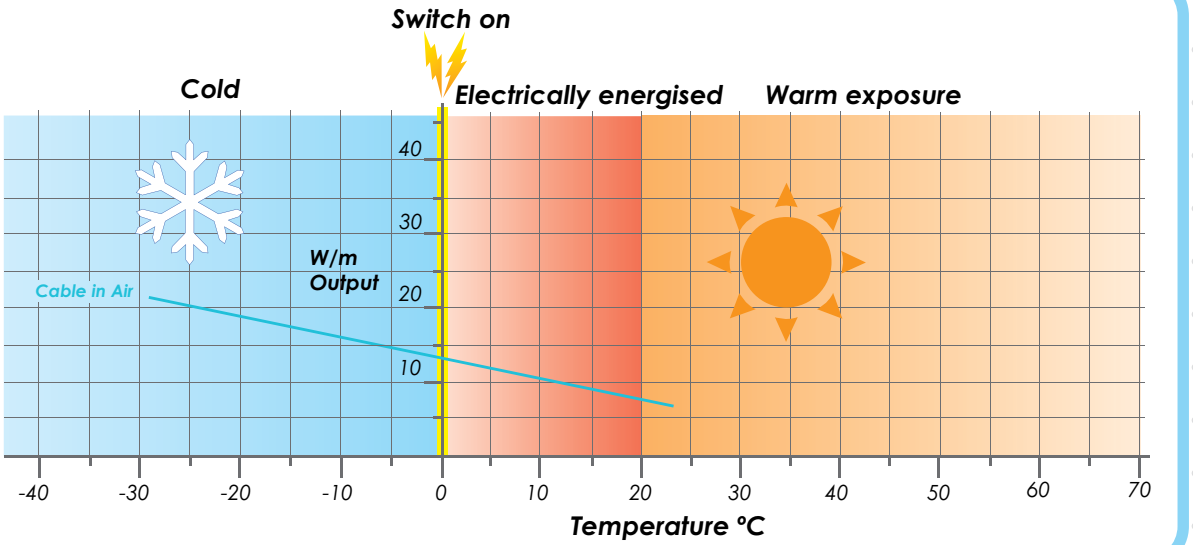
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Application Categories

Air

- **Roof Heating** - the weight of snow can damage roofs leading to expensive repairs or replacement, melting snow could form icicles or block gutters. OneTrace-i can be laid on the top of roofs to prevent snow build up.
- **Anti-condensation** - OneTrace-i can be used for anti-condensation of surfaces such as windows or mirrors.





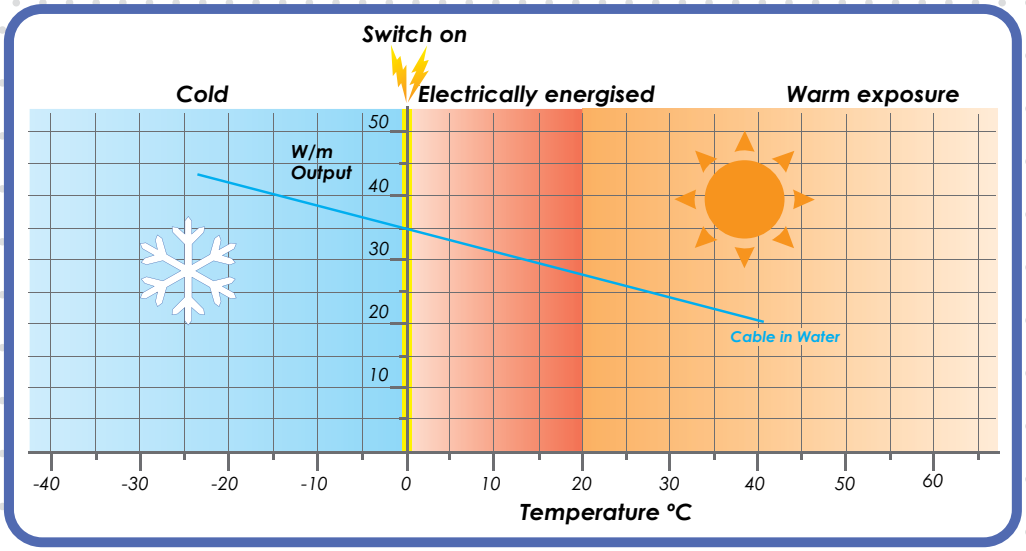


Environment	Typical Applications (Other applications are available)	Start-up Temperature	MCB rating, Max cable length at 230V 6A	10A	16A	20A	25A
Air	Exposed Roof Heating Anti-condensation Heating Wooden Floor in air cavity/void	0°C	58m	96m	116m	-	-

Ice / Water

- **Gutter heating** - as snow build up melts on roofs, water can gather in gutters and in cold climates can freeze and block gutters and drains or become heavy, causing leaks. OneTrace-i can be placed in the gutters to prevent freezing.
- **Pond heating** - OneTrace-i can be laid around the perimeter of ornamental ponds within the water level to prevent freezing, if allowed to ice over damage to the pond structure can occur.
- **Water/feeding troughs** - to prevent agricultural animals water/feeding troughs from freezing.
- **Header tanks** - OneTrace-i can be applied to Header Tanks in cold loft spaces for frost protection of water supplies.





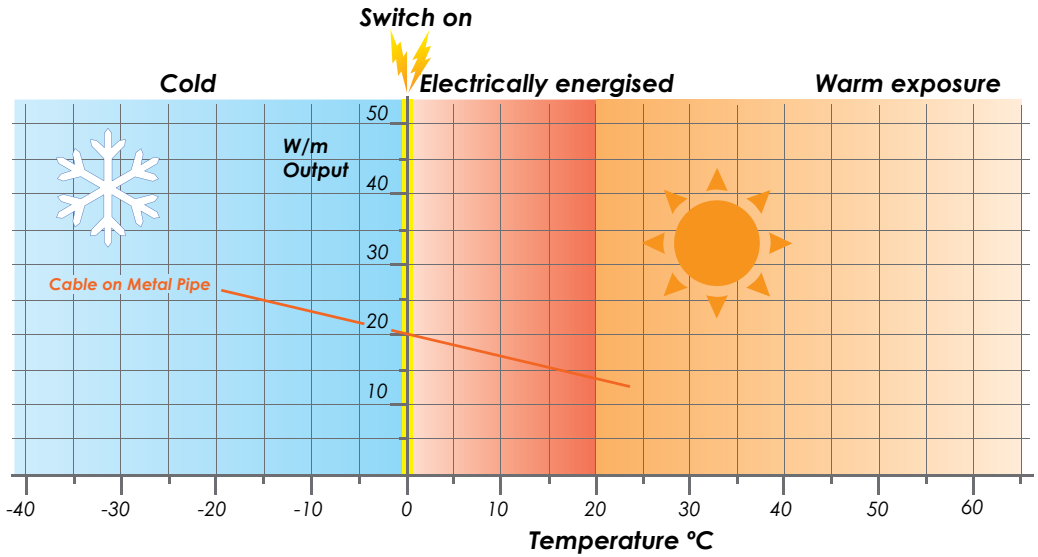


Environment	Typical Applications (Other applications are available)	Start-up Temperature	MCB rating, Max cable length at 230V 6A	10A	16A	20A	25A
Ice / Water	Gutter Heating, Pond Heating, Feeding Toughs, Header Tanks (internal)	0°C	18m	32m	50m	62m	66m

Metal Pipes / Surfaces (Insulated)

- **Frost Protection** - water supply, sprinkler systems, drainage, fuel lines and pipes in unheated areas can freeze, burst and cause serious damage. Thermal insulation alone will only slow the process down and not prevent it from happening. It will require the use of an electrical heating cable to prevent freezing.
- **Refrigerator doors -** to prevent the doors sticking due to freezing.
- **Flow maintenance** - OneTrace-i can be used for flow maintenance of oil and grease lines by heating the pipelines, lowering its viscosity to ensure flow through the pipe.





Environment	Typical Applications (Other applications are available)	Start-up Temperature	MCB rating, Max cable length at 230V 6A	10A	16A	20A	25A
Metal Pipes / Surfaces (Insulated)	Frost Protection, Heating of Oil Storage, Grease Pipelines, Boiler/ Gas Condensate, Refridgerator Doors, Mirror Demisters	0°C	40m	66m	96m	-	-

Temperature Maintenance Chart

Maintenance temperature shown in Degree ˚C against a 0˚C ambient.

Pipe Size (in)	Insulation thickness 12mm	25mm	37mm	50mm
½"	30˚C	37˚C	41˚C	43˚C
¾"	28˚C	35˚C	37˚C	41˚C
1"	24˚C	32˚C	36˚C	40˚C
1½"	22˚C	28˚C	33˚C	36˚C
2"	17˚C	25˚C	31˚C	35˚C
2½"	15˚C	24˚C	27˚C	31˚C
3"	14˚C	21˚C	26˚C	30˚C

Frost Protection Chart

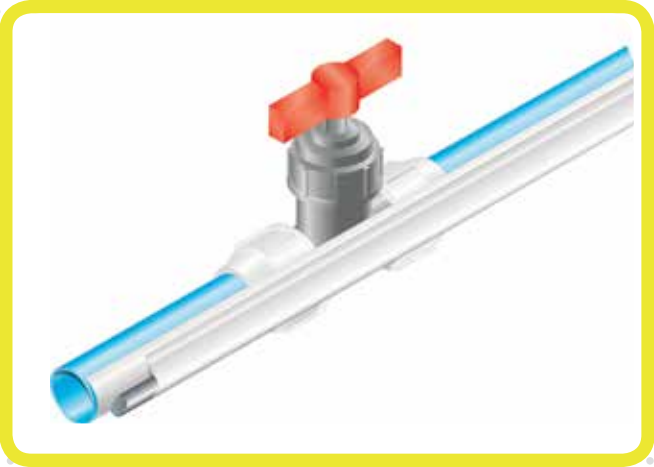
OneTrace-i will protect your pipe sizes detailed below to the temperature levels indicated when insulated to the advised thickness. The minimum temperatures given are based on your pipe being 10˚C.

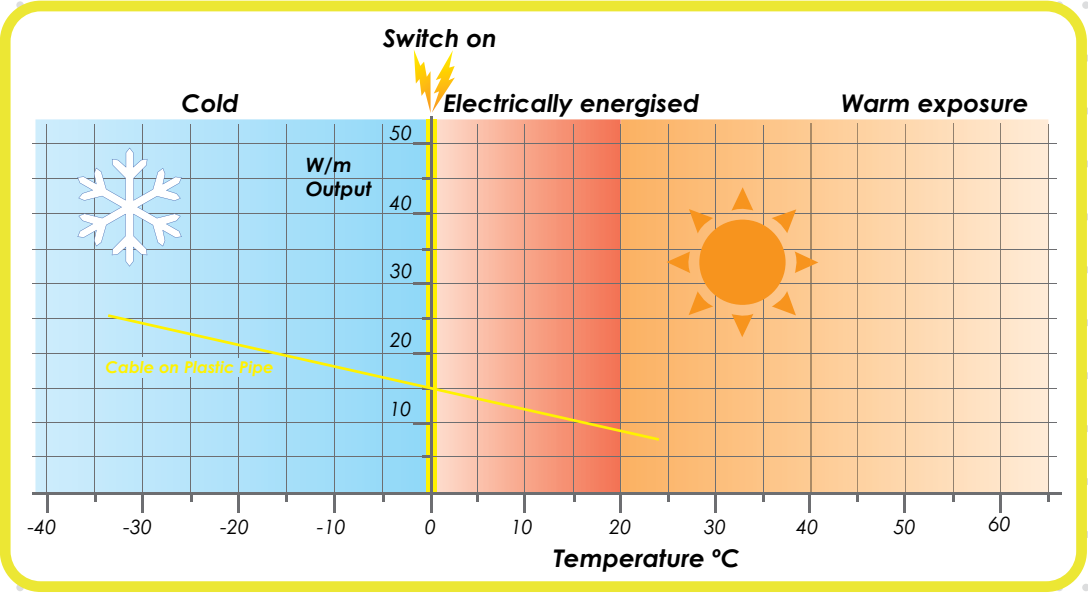
Pipe Size (in)	In Pipe O.D (mm)	Insulation thickness (mm) k = 0.036 w/m ˚C 12mm	25mm	37mm	50mm
½"	21.35	-35˚C	-	-	-
¾"	26.7	-29˚C	-	-	-
1"	33.4	-23˚C	-44˚C	-	-
1½"	48.3	-14˚C	-32˚C	-	-
2"	60.3	-11˚C	-25˚C	-37˚C	-48˚C
2½"	73.0	-7.5˚C	-21˚C	-31˚C	-41˚C
3"	88.9	-	-16˚C	-26˚C	-35˚C

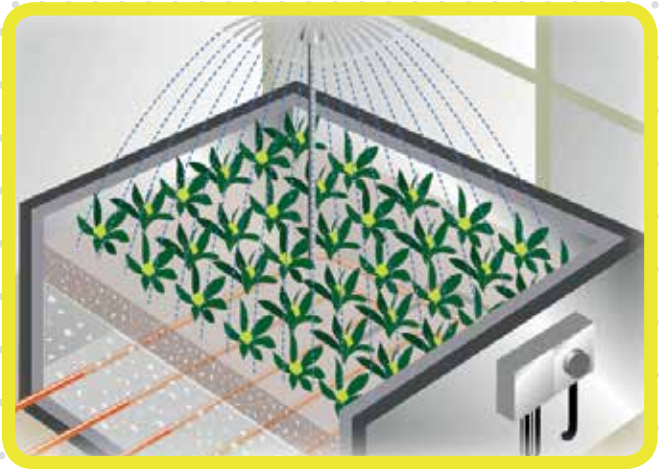
Plastic Pipes (Underfoiled & Insulated)

- **Temperature Control** of complex valved piping systems, such as those around pumping sets and manifolds, can create a problem for the designer. All pipe sections are not subjected to the same flow conditions. Often, only one or two pumps are operational whilst the remainder are in the standby or no flow condition. A temperature sensor located on a flowing pipe may de-energise tracing on static lines when heat is actually needed and vice-versa.

- OneTrace-i can be used on plastic pipes for agricultural water supplies, irrigation sprinklers and waste pipelines to prevent liquids freezing in the pipes. On plastic pipes a thermostat, sensing pipe temperature must be used.







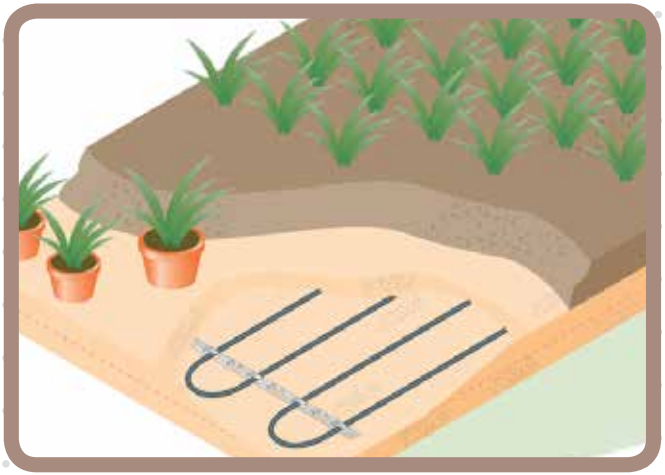
Environment	Typical Applications (Other applications are available)	Start-up Temperature	MCB rating, Max cable length at 230V 6A	10A	16A	20A	25A
Plastic Pipe (Unfoiled & Insulated)	Frost Protection, Process Pipework, Sprinkler Systems, Agrigcultural Water Supplies, Irregation Pipework, Waste Pipelines	0°C	46m	78m	102m	-	-

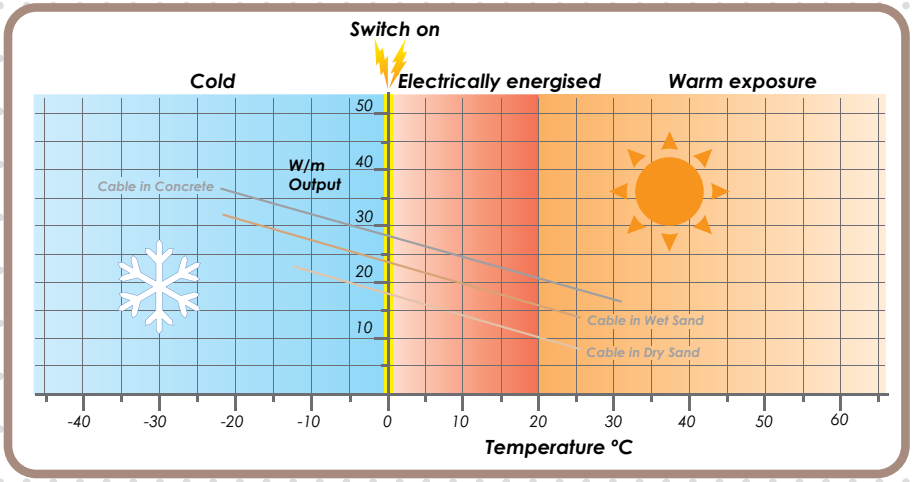
Embedded (Concrete/Soil/Sand)

- **Snow and Ice Prevention** - Snow build-up or ice formation on vehicle access ramps and roadways, pedestrian access ramps and pathways can present a hazard for both vehicles and pedestrians alike, preventing safe access or exit, particularly in an emergency. HTL's OneTrace-i offers a low cost, automatic and environmentally friendly solution, preventing ice formation and melting snowfall.

- **Soil Warming** - allows earlier planting of cold weather crops such as peas, garlic, onions, radishes, etc. Corn seeds will simply rot in the ground if planted in soil that is too cold. The safest, most efficient, and longest lasting results will be achieved by using OneTrace-i self-regulating heating cable placed in a layer of sand under the cold frames, cloches, or propagation benches to be heated. OneTrace-i stimulates root growth ensuring a sturdy and healthy crop. Being embedded in soil it prevents frost heave which results in upward swelling of soil caused by an increasing presence of ice as it swells and grows towards the surface upwards from the depth in the soil where freezing temperatures have penetrated into the soil.

- **Concrete curing** - OneTrace-i can be embedded into concrete to speed up the curing process timescale by applying heat throughout the concrete.





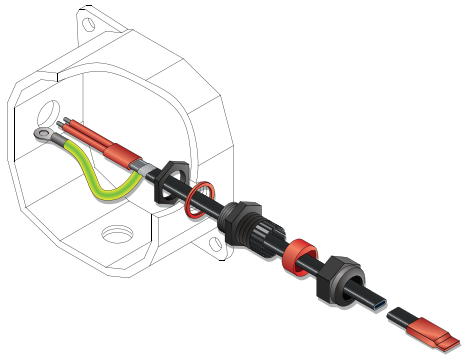


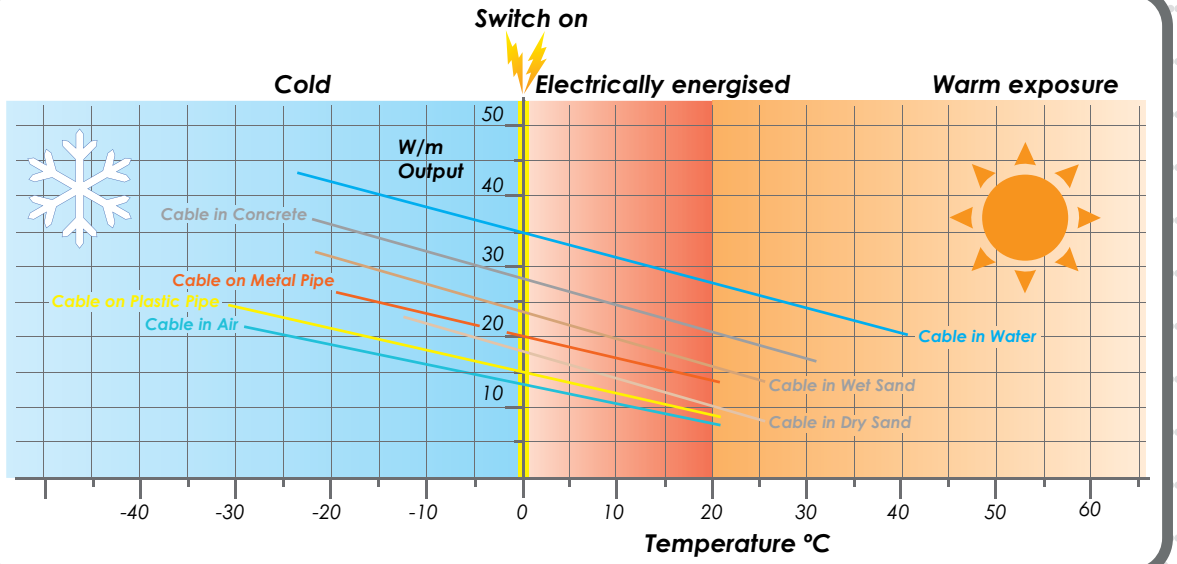
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Embedded (Concrete/ Soil/Sand)	Emergency Exits, Driveways, Ramps for Commercial Buildings, Anti-frost Heave, Horticultural - Soil Warming, Concrete Curing	0°C	22m	38m	60m	72m	-

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OneTrace-i Accessories:

- UTK144





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