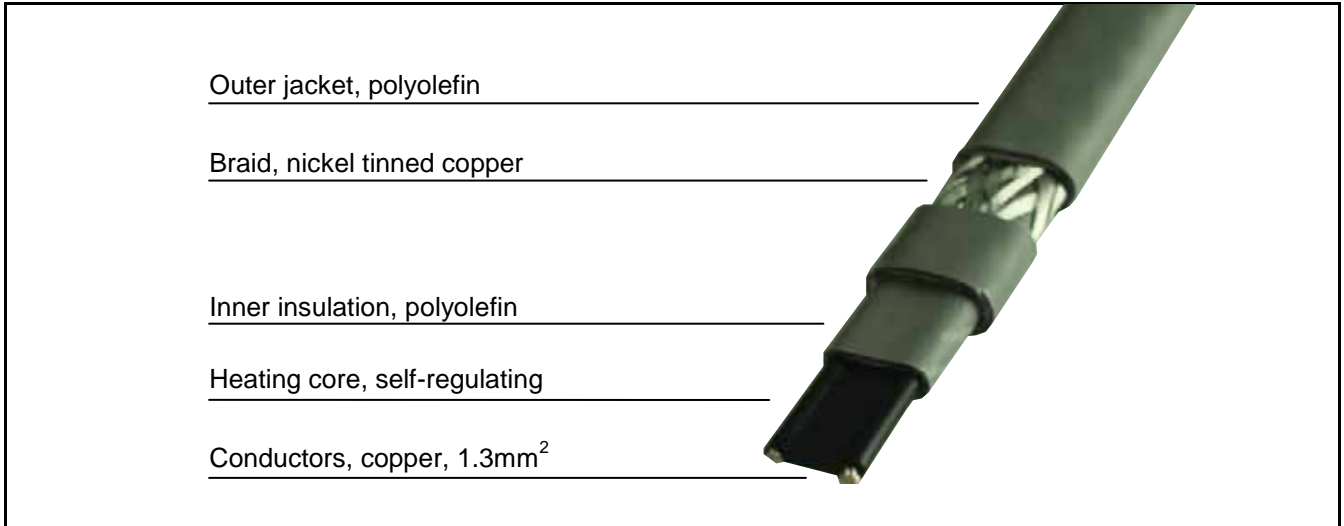


To prevent hot pipes from freezing and to maintain pipe temperatures.

Self-regulating, parallel circuit electric trace heating cable. Withstands 100°C when de-energised.

Cable construction



Application

Area type	General Purpose
Contamination compatibility	Mild inorganic corrosives
Host surfaces	Metallic and plastic piping
Tracing contact	Common non-setting adhesives Common thermoplastics and elastomers Common paints Common pipe insulation materials

Physical attributes

Conductor construction	Nickel plated copper, twisted strands
Conductor size	1.3 mm ²
Inner insulation material	Flame retardant polyolefin
Earth braid construction	Nickel tinned copper
Maximum earth braid resistance	18.2 Ω/km
Outer jacket material	Insulative flame retardant polyolefin
Voltage ratings	Inner insulation: 6kV, outer insulation: 3kV
Nominal cross section dimensions	12.8 x 5.5 mm
Marking	Every 1 metre: CE mark, ratings, length graduation , serial number
Weight	0.102 kg/m
Maximum withstand temperature	80°C, when energised*, 100°C when de-energised
Minimum installation temperature	-50°C
Minimum bend radius at 0°C	20mm (15mmØ copper pipe)

* In freeze protection applications, the highest temperature that de-energised **SafeWat** will be exposed to is nominally 5°C. Whilst LTHW is in service, **SafeWat** is de-energised because freeze protection is not necessary. When LTHW is taken out of service, its piping will cool, so to protect against freezing, **SafeWat**'s TraceStat2L thermostat will monitor the pipe temperature and energise **SafeWat** should it measure 3°C. Later, when it measures 5°C, the thermostat will de-energise **SafeWat** whilst continuing to monitor the pipe temperature to protect against freezing.

Thermal Output

Heat output at 230Vac on lagged metallic pipe.

At 0°C	37.5 W/m
At 5°C	35.5 W/m
At 10°C	33.0 W/m

Pipe Insulation

Insulation thickness (mm) necessary to maintain nominally 5°C in a minimum ambient temperature of -15°C.

	Outside Diameter of Pipe (mm)											
Insulation mean conductivity	15	22	28	35	42	48	54	76	89	114	168	219
0.025 W/mK	15	15	15	15	15	15	15	15	15	15	15	15
0.035 W/mK	20	20	20	20	20	20	20	20	20	20	20	20
0.045 W/mK	6	6	6	6	6	6	9	9	13	13	19	25

Please consult office:
if piping is plastic,
if pipe sizes are greater than 219Ø

Power Supply

Rating	240V AC ± 10%, 50Hz
Protection	Type C or D breaker (BS EN60898) RCD recommended
Local isolator	Unfused, typically the 20Amp rated, double pole type

Maximum aggregate length of **SafeWat** permitted in a system according to breaker size and switch-on pipe temperature.

	Breaker Size (Amps)			
Pipe temperature	6	10	16	20
3°C	26m	44m	70m	88m

Ancillaries

For precise thermostatic control and power supply connection	TraceStat2 digital thermostat with volt-free contacts for BMS, ±1°C.
For conductor termination	TKH20 kit
For branch joints	JB420B trace heating junction box, connects up to four SafeWat cables
To fix SafeWat to the pipe	TP105 high temperature fixing tape and / or CN20048 tie-wraps
To fix a TraceStat2 to the pipe	BS90 or BS280 pipe clamps
To fix a JB420B to the pipe	CN20048 tie-wraps
For hazard notification	LHazP caution labels every 3 to 5m on the outside of the pipe insulation