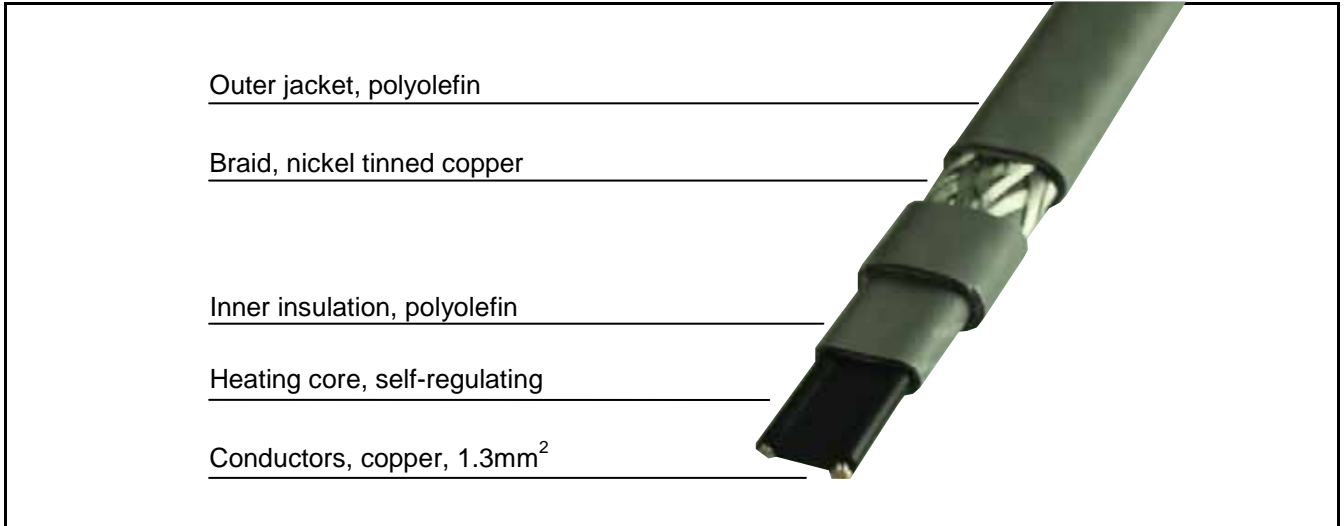


To maintain Hot Water Service pipe temperature without the need for a control device.

Self-regulating, parallel circuit electric trace heating cable. Withstands 80°C continuously.

## Cable construction



## Application

Area type	Public Health 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 <sup>2</sup>
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)

## Thermal Output

Heat output at 230Vac on lagged metallic pipe.

At 50°C	11.5 W/m
At 55°C	9.5 W/m
At 60°C	7.5 W/m

## Pipe Insulation

Insulation thickness (mm) necessary to maintain nominally 55°C in a minimum ambient temperature of 18°C.

	Outside Diameter of Pipe (mm)						
Insulation mean conductivity	15	22	28	35	42	48	54
0.025 W/mK	15	15	15	20	25	30	30
0.035 W/mK	20	20	25	30	40	50	50
0.040 W/mK	19	25	32	50	50	-	-

Please consult office:  
if piping is plastic,  
if pipe sizes are greater than 54Ø

## Power Supply

Rating	230V 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	25	32
5°C	32	53	85	107	122	122
12°C	39	64	103	123	130	130
18°C	45	74	119	137	137	137

## Ancillaries

For power supply connection	JB420B trace heating junction box
For conductor termination	TKH20 kit
For branch joints	JB420B trace heating junction box, connects up to four <b>SafeWat</b> cables
To fix <b>SafeWat</b> to the pipe	TP105 high temperature fixing tape and / or CN20048 tie-wraps
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
For BMS signals	Volt-free contacts