



THW € Self-Regulating Heating Tape

Electrical heating tape for temperature maintenance of hot water services in domestic and commercial buildings

- Maintains hot water at desired temperature
- Eliminates the need for return pipework and re-circulating pumps
- Will not overheat or burnout, even when overlapped
- Hot water instantly available at each outlet
- Highly economical
- Full range of controls and accessories
- Available for 220/240VAC

Features

When hot taps are infrequently used, the water residing in the distribution pipework cools and is usually run to waste before hot water from the storage cylinder arrives at the tap.

The use of re-circulating systems usually only maintains the water temperature in the main pipes and doubles the amount of pipework from which heat, and therefore energy, is lost.

THW is a parallel resistance, self-regulating heating cable designed to compensate for heat losses from hot water distribution systems.

The heater comprises a semi-conductive self-regulating heating element which automatically reduces its power output as the pipe temperature increases. Thus, the heater cannot overheat or burn out.

By applying **THW** to the pipework (beneath the thermal insulation), heat losses are eliminated and the water is maintained at the required temperature. Further savings are achieved by removing the need for re-circulating pipework together with pumps, valves, etc.

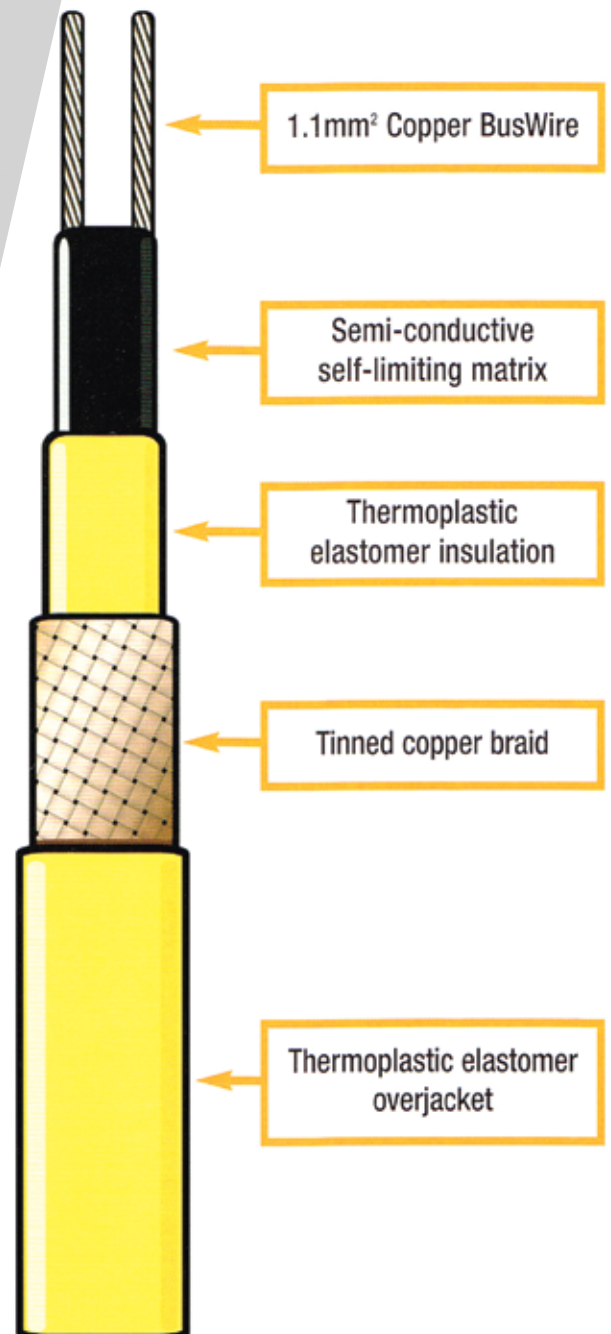
There are two **THW** systems available. **THW-R** is simply used to maintain the pipework at approximately 50-60°C, whilst **THW-P** is used to maintain 45-70°C during normal operation with an extra disinfection feature at timed intervals to reduce risks of legionella.

The application of **THW** to insulate hot water pipework enables hot water to be available at each tap and dramatically improves the system efficiency compared with un-insulated re-circulating pipework systems.

Options

THW-R THW REGULAR heating tape with a thermoplastic overjacket for maintaining the pipework at approximately 50-60°C.

THW-P THW PLUS heating tape with a thermoplastic overjacket for maintaining the pipework between 45-70°C with the added benefit of thermal disinfection.



SPECIFICATION

Maximum Temperature	80°C (176°F)		
Max. Permissible Temperature De-energised (100 hrs cumulative)	100°C (212°F)		
Maximum Installation Temperature	-40°C (-40°F)		
Power Supply	220 – 240VAC (on demand 110 – 120VAC)		
Maximum Resistance of Protective Braiding	18.2 Ohm/km		
Weights and Dimensions			
Type Ref	Norm. Dims (mm)	Weight kg/100m	Min. Bending Radius
THW	13.1 x 6.0	13.2	30mm

MAXIMUM LENGTH (m) vs. CIRCUIT BREAKER SIZE						
Cat Reference	Start-up Temperature	230V				
		6A	10A	16A	20A	
THW-R	18°C	56	92	128	-	
	0°C	38	64	102	128	
THW-P	18°C	34	56	90	94	
	0°C	24	40	64	80	

For use with Type C circuit breakers to BS EN60898:1991

RECOMMENDED INSULATION THICKNESS (mm)							
Cat Ref	Maintain Temperature	Pipe Size (mm)					
		15	22	28	35	42	54
THW-R	60°C	25	30	40	50	60	75
	55°C	20	25	30	40	50	60
	50°C	15	20	25	30	40	50
THW-P	45-70°C	30	40	50	60	75	75

The above figures are based on the thermal insulation having a K-value of 0.038W/mK at 36°C mid-point temperature.

SYSTEM FEATURES		
	THW-R	THW-P
Hot Water Supply System	Localised or Centralised	Centralised
Temperature Control System	Fixed temperature	Variable temperature setting by POWERTRIM
Thermal Pasteurisation	Not Available	D-BUG timer unit or BMS (Building Management System)
Circuit Temp. Scanning	Not Available	CRUSADER (optional)
Electrical Supply	230V	230V
Typical Maintain Temperature	50, 55, or 60°C	45°C - 70°C
Nominal Output	9W/m at 55°C	9.5W/m at 70°C