

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
- Hot water instantly available at each outlet
- Highly economical
- Full range of controls and accessories
- Available for 220/240VAC
- Self-regulating heater cannot overheat or burn out

# 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.

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

The heater comprises a semi-conductve 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 HOTWAT 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 recirculating pipework together with pumps, valves, etc.

There are two HOTWAT systems available. HW-R is simply used to maintain the pipework at approximately 50-60°C, whilst HW-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 Hotwat to insulated 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**

- HW-R .. T HOTWAT REGULAR heating tape with a thermoplastic overjacket for maintaining the pipework at approximately 50-60°C.
- HW-P..T HOTWAT 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. PER de-energis	MISSIBLE TEMP ed (1000 hrs cur	PERATURE mulative)	100°C (212°F)		
MINIMUM TEMPERA	INSTALLATION TURE		–40°C (–40°F)		
POWER SUPPLY		(on dem	220 – 240VAC and 110 – 120VAC)		
MAXIMUN OF PROTE	1 RESISTANCE ECTIVE BRAIDING	G	18.2 Ohm/km		
WEIGHTS	& DIMENSIONS				
Таре Туре	Nom. Dims. (mm)	Weight kg/100m	Min.Bending Radius		
HW-xT	13.1 x 6.0	13.2	30mm		
x Denotes	Hotwat (R)egular,	or Hotwat (P)L	US		
ORDERING	G INFORMATION	Ι			
Example Hotwat hea Hotwat Rea Supply volt Overjacket	ating tape — GULAR style — age 220 – 240VA	C	HWR2-T		

#### ACCESSORIES

Heat Trace supply a complete range of accessories including termination/splice kits, end seals, junction boxes and controls. These items are recommended for the correct operation of HOTWAT products. Please consult the HOTWAT Product Design Guide PDG010 for further details.

#### FURTHER INFORMATION

Please consult the appropriate termination instructions and the Heat Trace Installation, Maintenance and Testing Manual (IMEHT010) for further details.

### MAXIMUM LENGTH (m) vs. CIRCUIT BREAKER SIZE

Cat Reference	Start-up Temperature	230V 6A	10A	16A	20A
HW-R	18℃	56	92	128	-
	0℃	38	64	102	128
HW-P	18ºC	34	56	90	94
	0ºC	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
HW-R	60°C 55°C 50°C	25 20 15	30 25 20	40 30 25	50 40 30	60 50 40	75 60 50
HW-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				
	HW-R	HW-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		



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