AHT

Electrical heating tape for process temperature maintenance of pipework and vessels in safe or hazardous locations

POWERHEAT

Constant Wattage Heating Tape

- *Withstand temperatures up to 425°C*
- *Outputs available to 150W/m*
- *Can be cut to length with no wastage*
- *Approved for use in non-hazardous, hazardous and corrosive environments*
- *Full range of controls and accessories*
- *Available for 110-120VAC and 220-277VAC*

FEATURES

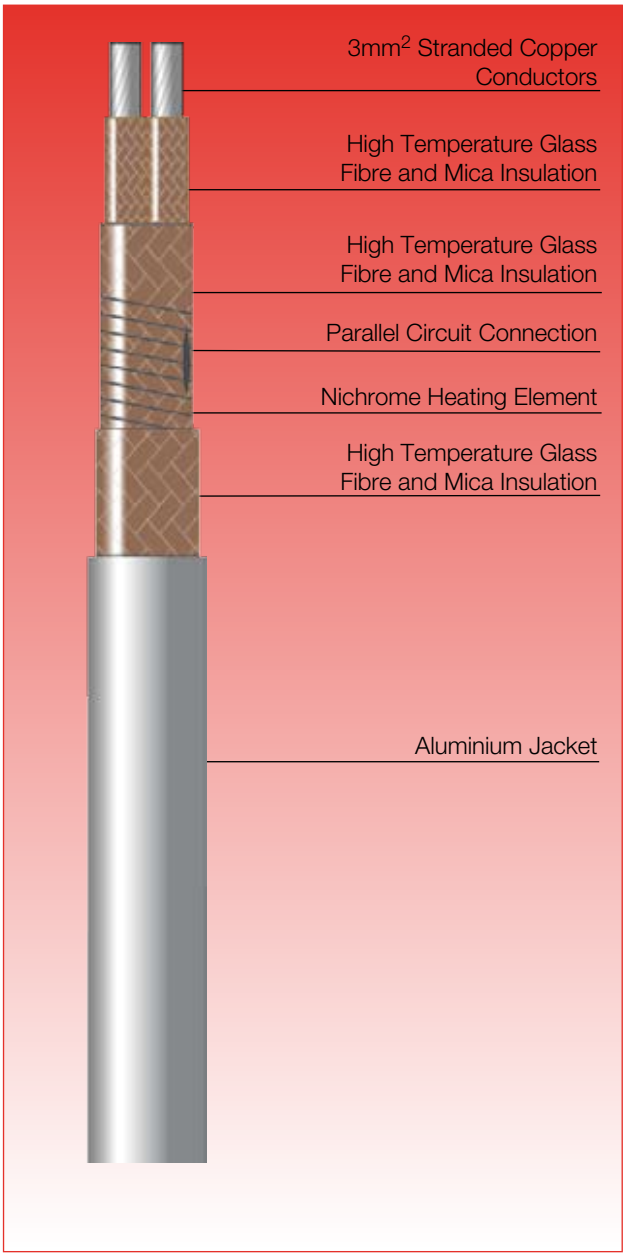
POWERHEAT Type AHT is a constant wattage heating tape that can be used for freeze protection or maintenance of process temperatures in pipework and vessels.

It can be cut-to-length at site and can replace mineral insulated (MI) cables for applications where the cut-to-length feature, or field fabricated heating cable is preferred.

AHT is approved for use in non-hazardous, and hazardous areas to world wide standards.

The installation of AHT heating tape is quick and simple and requires few special skills or tools. Termination and power connection components are all provided in convenient kits.

AHT is jacketted in a continuous aluminum extrusion for maximum mechanical strength, even after severe process upsets.



SPECIFICATION

MAXIMUM EXPOSURE TEMPERATURE	Continuous Intermittent	340°C (644°F) 425°C (797°F)
MINIMUM INSTALLATION TEMPERATURE		–40°C (–40°F)
TEMPERATURE CLASSIFICATION	350°C (T1) T2 (300°C) T3 (200°C) T4 (135°C) T5 (100°C) or T6 (85°C)	Devices are classified according to rated output and the conditions of use. ie. limited pipe temp
POWER SUPPLY		220 - 277 VAC or 110 - 120 VAC

WEIGHTS & DIMENSIONS

Type Ref	Nom. Dims. (mm)	Weight kg/100m	Min. Bending radius (mm)	Gland Size
AHT	10 x 7	16.5	25	M20

APPROVAL DETAILS

Testing Authority	Certificate No.	Standard
ATEX	Sira 02ATEX3079	EN60079-0:2012 IEC60079-31:2008 EN60079-30-1:2007
IECEx	Sira 11.0124	IEC60079-0:2011 IEC60079-30-1:2007-01 IEC60079-31:2008
FM	3009080	IEEE Std 515
CSA	1350782 1352981	C22.2 No. 130.1 C22.2 No. 130.2 C22.2 No. 138
DNV-GL	E12836	

Further approvals are available on request.

CONSTRUCTION

Heating Element	Nickel Chromium
Power	Nickel Plated
Conductors	Copper 3mm^2
Conductor Insulation	Glass/Mica
Primary Insulation	Glass/Mica
Jacket	Aluminium

ORDERING INFORMATION

Example 50AHT2

Nominal Output 50W/m
Powerheat type AHT
Supply Voltage 220 - 277VAC

MAXIMUM PIPE / WORKPIECE TEMPERATURES

The surface of the heater must not exceed the maximum withstand temperature of its constructional materials or the Temperature Classification (if installed in a hazardous area). This is ensured by limiting the pipe or workpiece temperature to a safe level either by design calculation (a Stabilised Design) or by means of temperature controls.

For worst case conditions, the temperature of steel pipes should be limited to the following levels:-

MAXIMUM PIPE / WORKPIECE TEMPERATURES (°C)

Area Classification	Hazardous[1]						Safe[2]
	T6	T5	T4	T3	T2	T1	
Catalogue Ref.							
15AHT	-	36	71	160	289	350	350
30AHT	-	11	28	100	246	323	323
50AHT	-	-	-	39	178	276	276
70AHT	-	-	-	-	48	140	140
100AHT	-	-	-	-	48	140	140
150AHT	-	-	-	-	-	36	36

Pipe temperatures higher than those given above may be accommodated by using Heat Trace Ltd voltage compensating devices eg. POWERMATCH™ - call for further details.
Tolerances: 115/230V +10%; Resistance +10%; -0%

The above data is for 230V heaters. For 277V heaters, contact your local Heat Trace Representative.

Notes

1 Surface temperature limits in accordance with EN50014.
2 Surface temperature limited by materials of construction (withstand temperature)

MAXIMUM CIRCUIT LENGTH*

Catalogue Ref.	115V	230V/277V
15AHT	59m	118m
30AHT	42m	83m
50AHT	32m	64m
70AHT	26m	54m
100AHT	23m	46m
150AHT	19m	37m

*For 10% volt drop variation

POWER CONVERSION FACTORS

115V HEATING TAPE	230V HEATING TAPE
125V Multiply output by 1.18	277V Multiply output by 1.45
120V Multiply output by 1.09	240V Multiply output by 1.09
110V Multiply output by 0.91	220V Multiply output by 0.91
100V Multiply output by 0.76	208V Multiply output by 0.82

ACCESSORIES

Heat Trace supply a complete range of accessories including termination/splice kits, end seals, junction boxes and controls. Such items carry separate approvals from the heating tapes. When used in hazardous areas, only use approved components.

ProTherm INDUSTRIES

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