



Electrical heating cable for process temperature maintenance of pipework and vessels in safe or hazardous areas

# POWERHEAT

# Constant Wattage Heating Cable

- Can be cut-to-length.
- Available for 110-120VAC and 220-240VAC.
- Power outputs up to 150W/m.

- Suitable for use in safe, hazardous and corrosive areas.
- Continuous aluminium outer-jacket.
- Full range of controls and accessories available.

# **DESCRIPTION**

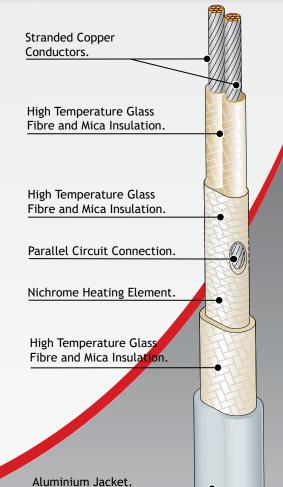
POWERHEAT Type AHT is a constant wattage heating cable that can be used for freeze protection or temperature maintenance of process temperatures in pipework and vessels.

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 cable 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.

























## **SPECIFICATION**

MAXIMUM EXPOSURE TEMPERATURE	Continuous Intermittent	350°C (644°F) 425°C (797°F)
MINIMUM OPERATION TEMPERATURE:	NG	-65°C* (-85°F)
MINIMUM INSTALLA TEMPERATURE:	ATION	-40°C (-40°F)
TEMPERATURE CLASSIFICATION:	See workpiece table.	temperature
POWER SUPPLY:		12 - 277 VAC

# INGRESS PROTECTION: WEIGHTS & DIMENSIONS:

Туре	Dimensions			
Ref	(mm) +/-0.5	kg/100m	radius	Size
AHT	10.7 x 7.7	16.5	25mm	M20

#### **APPROVAL DETAILS:**

Testing Authority		Certificate No.		
ATEX	€x>	CML 19ATEX3387		
IECEx	IEC TECEX	IECEx CML 19.0130		
FM	F M APPROVED	3009080		
CSA	<b>(3)</b> -	1350782 1352981		
CNEx	CNEX 国家防爆	CNEx19.1551U		
DNV-GL	DNV·GL	TAE000021KD		
EAC*	EAC	EAЭC RU C-GB.MЮ62.B.01122/19		

#### **CONSTRUCTION:**

Heating Element Nickel Chromium

Power Conductors Nickel Plated Copper

Conductor Insulation Glass/Mica

Primary Insulation Glass/Mica

Jacket Aluminium

### **ORDERING INFORMATION:**

Example	50AHT2
Nominal Output 50W/m —	
Powerheat Type AHT ———	
Supply Voltage 220-277 VAC	

#### 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:-

Area Classification	Hazardous'			Safe			
	T6	T5	T4	T3	T2	T1	
Catalogue Ref.							
10AHT	34	50	100	188	290	340	340
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. Please 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 Representive

#### Note

IP67

- 1 Surface temperature limits in accordance with EN60079.
- 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 cables. When used in hazardous areas, only use approved components.



