

- Withstand temperatures up to 285°C
- Outputs available to 70W/m
- Can be cut to length with no wastage
- CENELEC approved for use in hazardous areas
- Full range of controls and accessories
- Available for 110/120 and 220/240VAC

FEATURES

Powerheat type PHT is a constant wattage heating tape to BS6351 Grade 22 that can be used for freeze protection or maintenance of process temperatures in pipework and vessels.

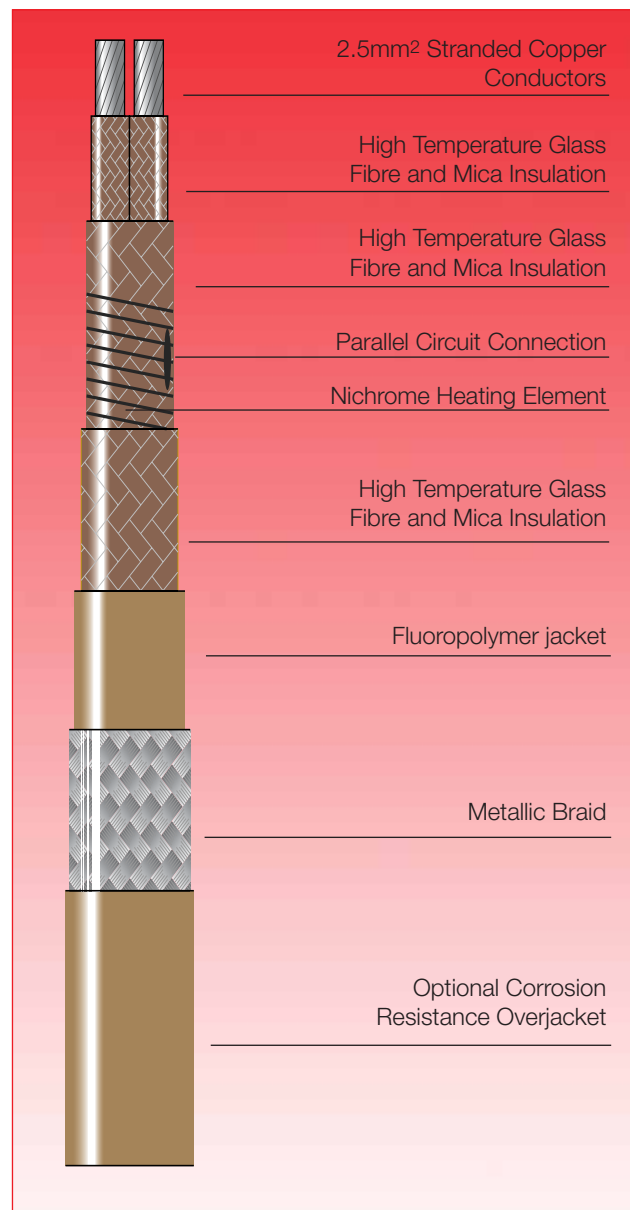
It can be cut-to-length at site and can replace mineral insulated (MI) cables for applications where the cut-to-length feature, or field fabricated heating cable is preferred.

PHT is CENELEC approved for use in hazardous areas.

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

OPTIONS

- PHT .. N** Nickel Plated Copper braid for non-hazardous areas, hazardous areas (Zone 1 or 2) or where traced equipment does not provide an effective earth path.
- PHT .. NF** Fluoropolymer over jacket over nickel plated copper braid provides corrosion protection for braid where chemical solutions or vapours may be present.



SPECIFICATION

MAXIMUM TEMPERATURE Un-energised 285°C (545°F)

MINIMUM INSTALLATION TEMPERATURE -40°C (-40°F)

TEMPERATURE CLASSIFICATION 285°C (T2)
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 - 240 VAC
or 110 - 120 VAC

WEIGHTS & DIMENSIONS

Type Ref	Nom. Dims. (mm)	Weight kg/100m	Min. Bending radius (mm)	Gland Size
PHT	8.8 x 6.0	12	25	M20
PHT..N	9.6 x 6.8	16	30	M20
PHT..NF	10.3 x 7.5	19	35	M20

APPROVAL DETAILS

CENELEC 

Certificate No. SCS Ex 94D3114
Standard EN50014:1992 & EN50019:1994
Area Approval Zone 1 and 2

CONSTRUCTION

Heating Element Nickel Chromium
Power Conductors Nickel Plated Copper 2.5mm²
Conductor Insulation Glass/Mica
Primary Insulation Glass/Mica
Jacket Fluoropolymer (PFA)
Braid Nickel Plated Copper
Over Jacket (optional) Fluoropolymer (PFA)

ORDERING INFORMATION

Example **70PHT2-NF**
Output 70W/m
Powerheat type PHT
Supply Voltage 220 - 240 VAC
Nickel Plated Copper Braid
Fluoropolymer overjacket

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.

MAXIMUM PIPE / WORKPIECE TEMPERATURES (°C)

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:-

CAT REF	NOM OUTPUT (W/m)	AREA CLASSIFICATION						
		HAZARDOUS ¹				SAFE ²		
		T6	T5	T4	T3	T2	T1	
PHT	10							275
	30							239
	50							192
	70							133
PHT..N	10	44	61	102	180	275	275	275
	30	-	-	24	116	241	241	241
	50	-	-	-	48	190	190	190
	70	-	-	-	-	129	129	129
PHT..NF	10	40	60	105	186	275	275	275
	30	-	-	22	132	249	249	249
	50	-	-	-	63	204	204	204
	70	-	-	-	-	147	147	147

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: Voltage +10%; Resistance +10%; -0%

Notes

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

MAXIMUM CIRCUIT LENGTH

OUTPUT (W/m)	MAX. CIRCUIT LENGTH*		ZONE LENGTH (NOM.)	
	115V	230V	115V	230V
10	79m	152m	contact your local Heat Trace representative for details.	
30	46m	88m		
50	35m	68m		
70	30m	56m		

*For ±10% end-to-end power output variation

POWER CONVERSION FACTORS

115V HEATING TAPE		230V HEATING TAPE	
277V	Multiply output by 5.80	277V	Multiply output by 1.45
230V	Multiply output by 4.00	240V	Multiply output by 1.09
208V	Multiply output by 3.27	220V	Multiply output by 0.91
120V	Multiply output by 1.09	208V	Multiply output by 0.82
110V	Multiply output by 0.91	115V	Multiply output by 0.25



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