PHT

285ºC

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.
- Power outputs up to 70W/m.
- Flexible and easy to install.
- Suitable for use in safe,hazardous and corrosive areas.
- High resistance to chemical attack.
- Full range of controls and accessories available.

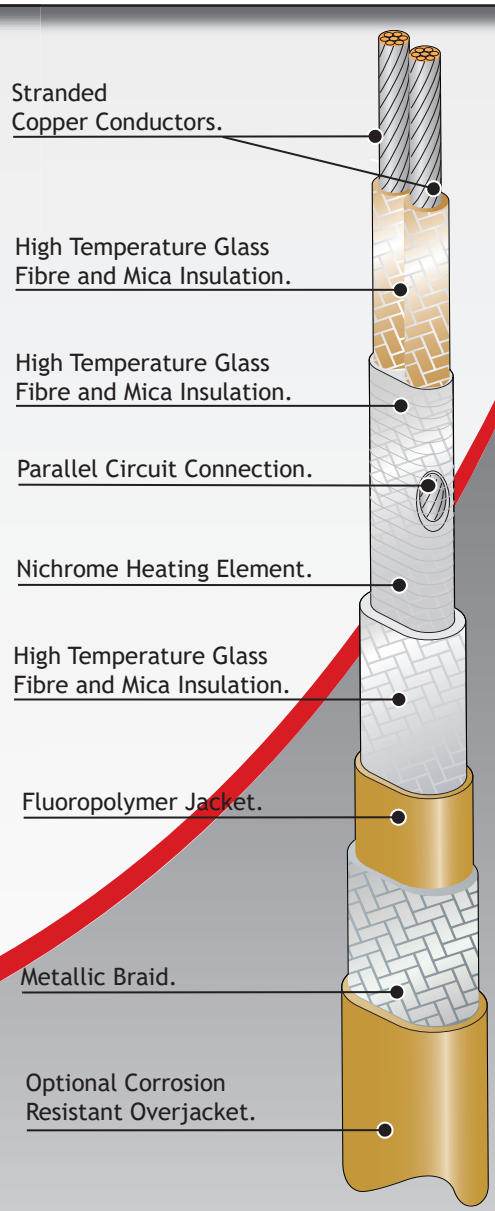
DESCRIPTION

Powerheat type PHT is a constant wattage heating cable manufactured in accordance with the latest International Standards. It can be used for freeze protection or process temperature maintenance of 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 approved for use in hazardous areas.

The installation of PHT heating cable is quick and simple, and requires no 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.

CE 2776

HEAT TRACE™ SETTING THE STANDARDS LEADING THE WAY

45 Years 1974 - 2019

The Heat Tracing Authority™

CWDS0204 (11062019)

SPECIFICATION

MAXIMUM CONTINUOUS EXPOSURE TEMPERATURE (Power OFF)	285°C (545°F)
MAXIMUM PERMISSABLE EXPOSURE TEMPERATURE (Power ON)	See workpiece Temperature table
MINIMUM INSTALLATION TEMPERATURE:	-40°C (-40°F)
POWER SUPPLY:	12 - 277 VAC

WEIGHTS & DIMENSIONS:

Type Ref	Dimensions (mm) +/-0.5	Weight kg/100m	Min Bend Radius	Gland Size
PHT..N	10.23 X 7.1	15	45mm	M20
PHT..NF	11.13 X 8.0	17	50mm	M20

APPROVAL DETAILS:

Testing Authority	Certificate No.
ATEX	CML 17ATEX3169
IECEx	IECEx CML 17.0084

CONSTRUCTION:

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

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 seperate approvals from the heating cable. When used in hazardous areas, only use approved components.

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:-

Catalogue Ref.	Nom Output	Area Classification						
	(W/m)	Hazardous[1]						Safe[2]
		T6	T5	T4	T3	T2	T1	
PHT..N	10	43	60	100	181	275	275	275
	30	-	-	25	114	234	234	234
	50	-	-	-	49	186	186	186
	70	-	-	-	-	125	125	125
PHT..NF	10	39	59	106	186	275	275	275
	30	-	-	20	133	243	243	243
	50	-	-	-	64	201	201	201
	70	-	-	-	-	147	147	147

Pipe temperatures higher than those given above may be accommodated by using Heat Trace Ltd voltage compensating devices. Please call for further details.

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

Notes

1 Surface temperature limits in accordance with current standards.

2 Surface temperature limited by materials of construction (withstand temperature).

MAXIMUM CIRCUIT LENGTH

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

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

POWER CONVERSION FACTORS **See note below*

115V Heating Cable	230V Heating Cable
277V x output by 5.8	277V x output by 1.45
230V x output by 4.0	240V x output by 1.09
208V x output by 3.27	220V x output by 0.91
120V x output by 1.09	208V x output by 0.82
110V x ouput by 0.91	115V x output by 0.25

*Maximum power output of cable in hazardous area should not exceed 70W/m. Do not use voltage multiplier if resulting power output exceeds 70W/m.

CWDS0204 (11062019)