# RHT

Electrical heating cable for
freeze protection of rails,
switch points,tramways and monorails.

# Rail & Switch Point Heater

- Outputs available up to 220W/m.
- Heated lengths up to 6 metres for turnouts.
- Can be cut-to-length to suit switch size.
- Full range of controls and accessories.
- Available for 115 & 230VAC (nom).
- Voltages to 1000V AC or DC for 3rd rails.

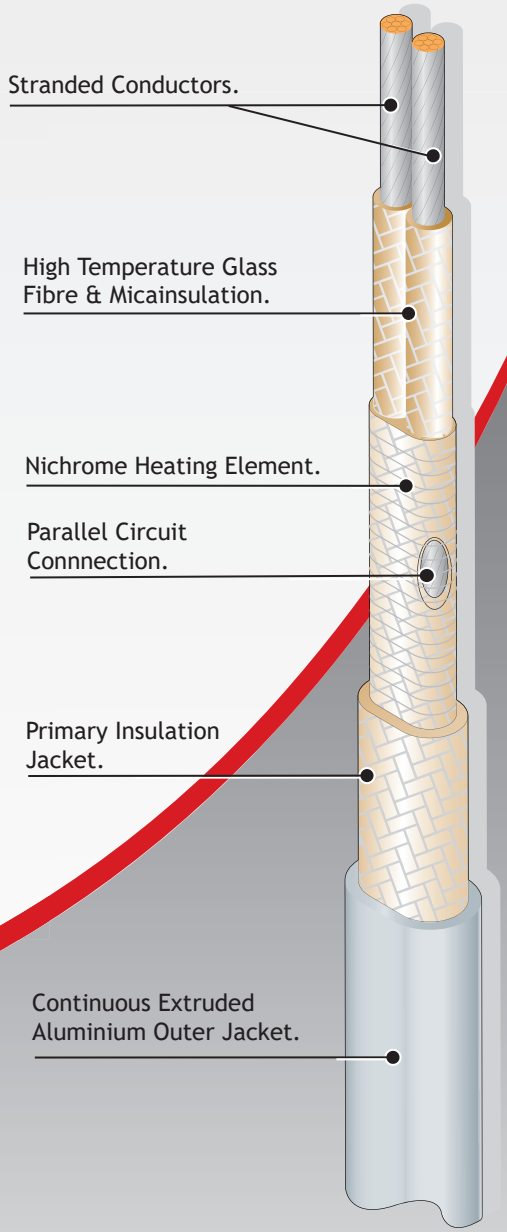
## DESCRIPTION

Rail heater type RHT is a parallel resistance, constant power output cable for use on main rail switch point systems, electrified 3 rails, monorails and tramway systems.

RHT is a cut-to-length cable designed to maintain snow and ice free systems to ensure track operational integrity in winter conditions. Simple and quick installation ensures minimum track possession time.

When used for point heating systems RHT is intended to be pre-terminated in 3m; 4m; 5m & 6m heated lengths to suit the turnout dimensions. It is suitable for direct replacement of existing strip heaters on the stock rails and switch rails.

The cable is designed to utilise rail industry standard and approved heater retaining clips. Thermally insulated capping is also available if required.




## ACCESSORIES

Heat Trace supply a complete range of rail heater accessories: termination components, c/w remote end seal and sealant; EPR cold lead to heater power connection kit; EPR 2 core cold lead cable; thermally insulated capping; heater retaining clips; termination, installation and testing instructions. These items are recommended for the correct usage and operation of RHT heaters.

### FURTHER INFORMATION

Please consult the appropriate TK/RHT termination instructions and the RHT Installation Instructions (currently under revision) contact HTL for details.

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*The* Heat Tracing Authority™

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# SPECIFICATION

**MAXIMUM EXPOSURE TEMPERATURE:** Continuous 350°C (644°F)
Intermittent 425°C (797°F)

**MINIMUM INSTALLATION TEMPERATURE:** -65°C (-85°F)

**POWER SUPPLY:** 230 or 115VAC (nominal)

(voltages also available to order 24V to 1000V AC or DC)

## WEIGHTS & DIMENSIONS:

| Type Ref | Dimensions (mm)+/-0.5 | Weight kg/100m | Min Bending radius | Gland Size |
|---|---|---|---|---|
| RHT | 10.0 x 7.0 | 16.5 | 25mm | M20 |

## ORDERING INFORMATION:

Example: 220 RHT 2 - F

- 220 — Output 220W/m
- RHT — Rail Heater RHT
- 2 — Supply Voltage 230VAC
- F — Fluoropolmer Overjacket (Optional)*

## IMPORTANT NOTES 1:

The RHT range of rail heaters should only be fittedto rails using the manufacturer's recommended and approved methods. The heating cables should only be terminated in accordance with the manufacturer's instructions, in order to ensure the heaters integrity is not compromised.

When the heater is being used on 3rd/live rails, outer insulating jackets of fluoropoymer are available and are extruded over the outer metal jacket.*This jacket will reduce the maximum withstand of the cable to 265°C (509°F).

Full details of all control and ancillary equipment is available on request.

Typical Heated Points Systems - Milan, Italy.

## MAXIMUM CIRCUIT LENGTH:

| OUTPUT (W/m) | MAX.CIRCUIT LENGTH* 115V | 230V | ZONE LENGTH (NOM) 115V | 230V |
|---|---|---|---|---|
| 100 | 16m | 32m | Zone lengths can vary. Contact HTL for more information. | |
| 150 | 13m | 26m | | |
| 220 | 11m | 22m | | |

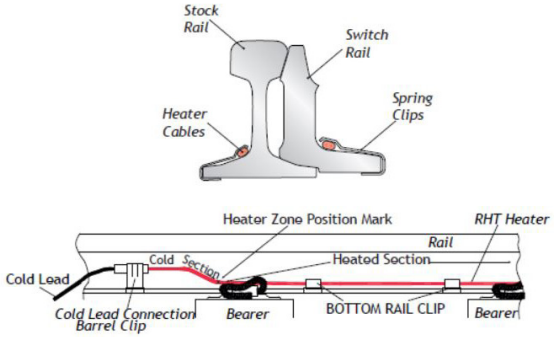
* For 10% end-to-end power output variation

## POWER CONVERSION FACTORS:

| 115V HEATING CABLE | 230V HEATING CABLE |
|---|---|
| 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 |

## IMPORTANT NOTES 2:

When fitting the RHT range of rail heaters it is important to ensure that the rail profilereference is known. This is so that the right clips can be provided, to ensure correct fitmentto the rail. The heaters need to be kept in contact with the rail, but still retain the ability to move logitudinally under normal expansion and contraction and to withstand the vibration and flexingof the rail during the expected operating conditions. It is recommended that clips are provided on either side of each bearer - as shown in the image below.




Recommended Heater & clip position (UIC60/60B rail)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