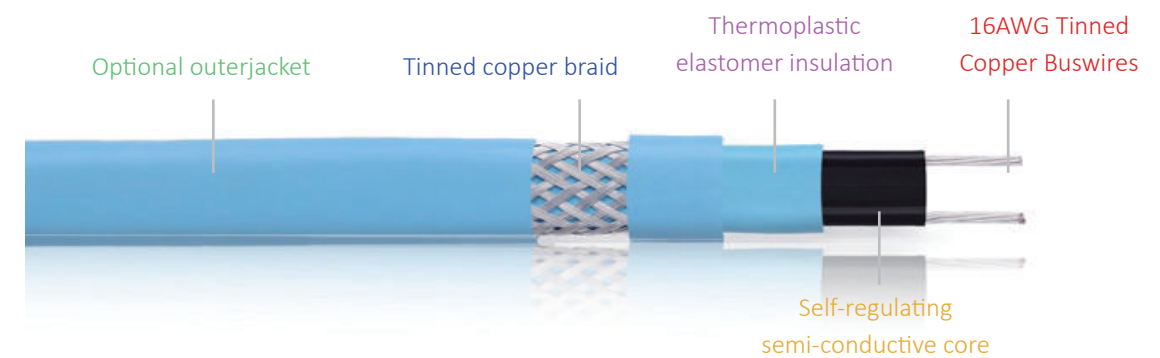


Self Regulating Heating Cable

HTR

Features

- Energy efficient, automatically varies its power output in response to pipe temperature changes.
- Easy to install, can be cut to any length (up to max circuit length) required on site with no wasted cable.
- Lower installed cost than steam tracing, less maintenance expense and less downtime.
- No overheat or burnout even when wrapped over itself (overlapped).
- Suitable for use in non-hazardous, hazardous and corrosive environments.
- Jiahong power connection, splice, tee and end seal kit will reduce installation time.



Description

HTR increases or decreases the heat output in a self-regulating way depending on the change of the ambient temperature, so a thermostat may not be necessary in some applications and it will never overheat or burnout even when wrapped over itself (overlapped). With optional outer-jacket, the heating cable is resistant to watery and inorganic chemicals and protects against abrasion and impact damage. HTR is suitable for use in explosion-hazardous areas up to a maximally admissible work-piece temperature of 150 °F (65 °C). Jiahong provides termination, power connection, splice, tee and end seal kit will reduce installation time and require no special skills or tools.

Options

- HTR...C** Tinned copper braid provides additional mechanical protection and a positive ground path.
- HTR...CR** Flame retardant thermoplastic outer jacket protects against certain inorganic chemical solutions, it also protects against abrasion and impact damage.
- HTR...CT** High-Temperature Fluoropolymer outer jacket is used for exposure to organic or corrosive solutions or vapors may be present.

Application

HTR, a UL listed self-regulating parallel heating cable (heating tape), is designed for industrial applications and environments, including hazardous and non-hazardous. It can be used for plastic or metal pipe freeze protection and flow maintenance of pipes, tanks, valves. It also can be used in roof and gutter de-icing applications. UV stabilized thermoplastic elastomer over jacket is provided to cover the braid for wet applications and exposure to the sun.

Technical data

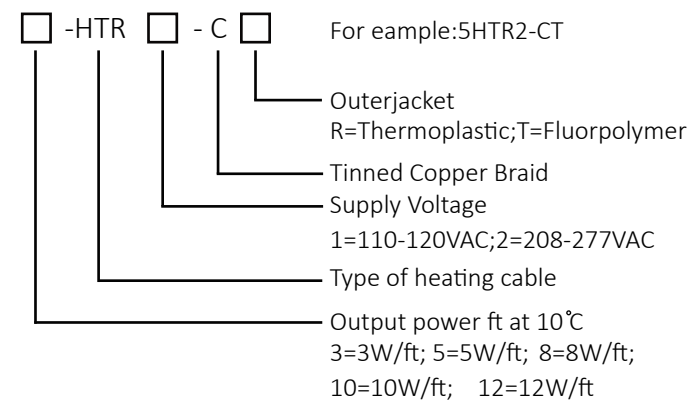
| | |
|---|--|
| Service voltage | 110-120V, 208-277V |
| Maximum maintain or continuous exposure temperature(power on) | +65 °C (150 °F) |
| Maximum intermittent exposure Temperature, 1000 hours (power on or off) | +85 °C (185 °F) |
| Minimum installation temperature | -40 °C (-40 °F) |
| Protective braid resistance | < 18.2Ω/km |
| Bus wire gauge | 16AWG |
| Approvals | UL / CSA / ETL / IECEx / ATEX / EAC / CE |

Dimension and weight

| Type | Dimension | Weight (kg/100m) |
|----------|------------|------------------|
| HTR...C | 11.0×4.4mm | 9.2 |
| HTR...CR | 12.6×6.0mm | 12.0 |
| HTR...CT | 12×5.4mm | 11.2 |

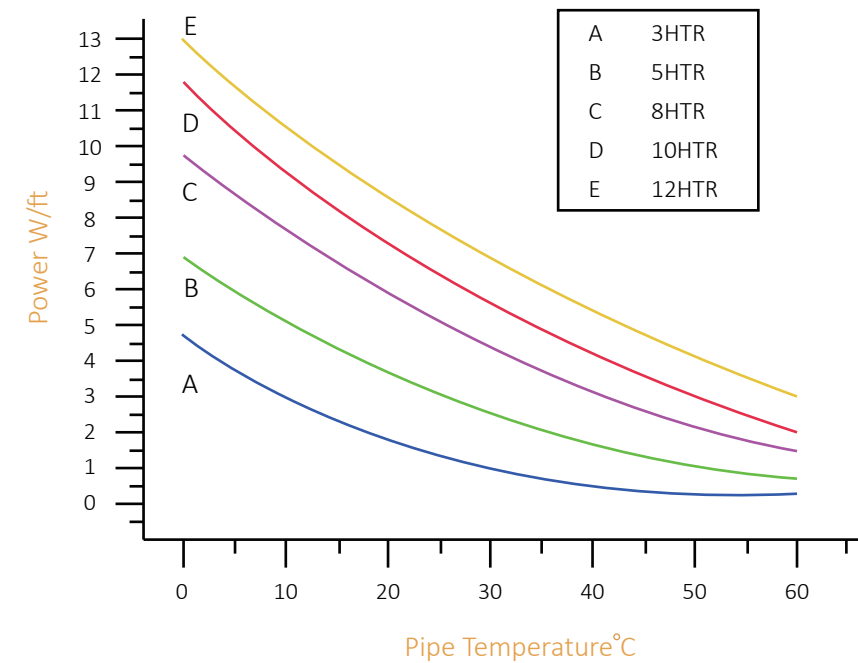
Minimum bend radius@68 °F (20 °C): 12 mm

Product ordering information



Power output curves

Nominal power output at 240V when HTR installed on insulated metal pipes.



Adjustment factors

| | Power output | | Circuit length | |
|-------|--------------|------|----------------|------|
| | 208V | 277V | 208V | 277V |
| 3HTR | 0.82 | 1.13 | 0.96 | 1.08 |
| 5HTR | 0.85 | 1.12 | 0.94 | 1.09 |
| 8HTR | 0.89 | 1.08 | 0.93 | 1.11 |
| 10HTR | 0.89 | 1.08 | 0.92 | 1.11 |
| 12HTR | 0.89 | 1.08 | 0.92 | 1.11 |

Maximum circuit length (in feet) per circuit breaker

| | Ambient temperature at start-up | | 120V | | | | 240V | | | |
|--------------|---------------------------------|---------|------|-----|-----|-----|------|-----|-----|-----|
| | | | 15A | 20A | 30A | 40A | 15A | 20A | 30A | 40A |
| 3HTR | 50 F | (10 C) | 330 | 330 | 330 | 330 | 660 | 660 | 660 | 660 |
| | 32 F | (0 C) | 330 | 330 | 330 | 330 | 660 | 660 | 660 | 660 |
| | 14 F | (-10 C) | 270 | 280 | 330 | 330 | 540 | 560 | 660 | 660 |
| | 0 F | (-18 C) | 200 | 265 | 330 | 330 | 395 | 530 | 660 | 660 |
| | -20 F | (-29 C) | 175 | 235 | 330 | 330 | 350 | 465 | 660 | 660 |
| | -40 F | (-40 C) | 155 | 205 | 310 | 330 | 310 | 410 | 620 | 660 |
| 5HTR | 50 F | (10 C) | 230 | 270 | 270 | 270 | 460 | 540 | 540 | 540 |
| | 32 F | (0 C) | 230 | 270 | 270 | 270 | 460 | 540 | 540 | 540 |
| | 14 F | (-10 C) | 180 | 210 | 270 | 270 | 360 | 420 | 540 | 540 |
| | 0 F | (-18 C) | 140 | 190 | 270 | 270 | 285 | 380 | 540 | 540 |
| | -20 F | (-29 C) | 125 | 165 | 250 | 270 | 250 | 330 | 500 | 540 |
| | -40 F | (-40 C) | 110 | 145 | 220 | 270 | 220 | 295 | 420 | 540 |
| 8HTR | 50 F | (10 C) | 150 | 200 | 210 | 210 | 300 | 400 | 420 | 420 |
| | 32 F | (0 C) | 150 | 200 | 210 | 210 | 300 | 400 | 420 | 420 |
| | 14 F | (-10 C) | 140 | 150 | 205 | 210 | 280 | 300 | 410 | 420 |
| | 0 F | (-18 C) | 100 | 130 | 200 | 210 | 200 | 265 | 400 | 420 |
| | -20 F | (-29 C) | 85 | 115 | 175 | 210 | 175 | 235 | 350 | 420 |
| | -40 F | (-40 C) | 80 | 105 | 155 | 210 | 155 | 210 | 315 | 420 |
| 10HTR | 50 F | (10 C) | 120 | 160 | 180 | 180 | 240 | 315 | 360 | 360 |
| | 32 F | (0 C) | 105 | 140 | 170 | 180 | 210 | 280 | 340 | 360 |
| | 14 F | (-10 C) | 95 | 125 | 165 | 180 | 190 | 250 | 330 | 360 |
| | 0 F | (-18 C) | 80 | 110 | 160 | 180 | 160 | 215 | 325 | 360 |
| | -20 F | (-29 C) | 70 | 95 | 140 | 180 | 145 | 190 | 285 | 360 |
| | -40 F | (-40 C) | 60 | 85 | 125 | 170 | 125 | 170 | 255 | 340 |
| 12HTR | 50 F | (10 C) | 80 | 140 | 150 | 150 | 160 | 270 | 310 | 310 |
| | 32 F | (0 C) | 75 | 130 | 145 | 150 | 150 | 260 | 290 | 310 |
| | 14 F | (-10 C) | 70 | 115 | 142 | 150 | 140 | 230 | 285 | 310 |
| | 0 F | (-18 C) | 60 | 80 | 140 | 150 | 120 | 160 | 280 | 310 |
| | -20 F | (-29 C) | 50 | 65 | 110 | 150 | 105 | 140 | 225 | 310 |
| | -40 F | (-40 C) | 45 | 60 | 90 | 140 | 90 | 125 | 190 | 280 |

Approvals

