



Constant Wattage Medium Temperature



Construction

1. **12 AWG Buss Wires**
2. **10 mils Insulation**
3. **10 mils insulation**
4. **Nichrome Resistance Wire**
5. **22 mils Insulation**
6. **Grounding Braid**
7. **Optional 15 mil FEP Overjacket**

Description

PFCH constant wattage heater cables are parallel-resistance electric heaters that provide constant power output along the entire length of cable. PFCH constant wattage heater cables are constructed of 12 AWG bright copper buss wires which allow for long circuit lengths and support maintenance temperatures up to 250°F. The fluoropolymer dielectric protects the cable from exposure temperatures up to 400°F when de-energized. This is suitable for process pipes that are periodically steam purged (150PSIG).

PFCH heater cables are perfectly safe in wet areas and provide excellent protection from impact and abrasion. The ground braid provides essential grounding protection and the optional fluoropolymer overjacket protects the braid in heavily corrosive environments from organic and inorganic compounds. PFCH heater cables can be custom tailored to meet specific customer needs including, flexible power outputs up to 20 W/Ft., flexible service voltages up to 500V and broad choice in colors for identification or aesthetic purposes.

Unlike some self-regulating heater cables, PFCH cables are not limited to predetermined voltages and do not exhibit inrush. PFCH cables typically last up to 4X as long as self-regulating heater cables and come with a standard 10 year warranty. PFCH heater cables can be cut to length in the field using standard electrical tools and should not be overlapped.

Applications

PFCH constant wattage heater cables are ideally suited for all freeze protection and low to medium temperature process maintenance applications where the flow of fluid is essential. In areas requiring electric tracing such as: pipelines carrying chemicals, lubricants, food process, potable water, fire prevention systems and de-icing of roofs and downspouts. PFCH cables are also an ideal solution for frost heave prevention systems and cryogenic systems such as LNG and ammonia storage. PFCH heater cables will provide the exact amount of protection necessary for your applications requirements.



HEAT TECHNOLOGY INC.

Ordering Information

| Example Configuration | | | FEP 9-277 (TC)(OJ) | |
|-----------------------|----------|-----------|---------------------------------|---------------|
| PFCH | Wattage | Voltage | Braid/Jacket | Weight/1,000' |
| | 3 - 20 W | 110 - 120 | (TC) = Tinned Copper | 80 Lbs. |
| | | 220 - 277 | (NPC) = Nickel Plated Copper | 79 Lbs. |
| T Rating | T-3 | 308 - 480 | (TC)(OJ) = Fluoropolymer Jacket | 90 Lbs. |

Note: For specific voltages, please specify exact VAC (i.e. 208, 220, 277 etc...)

Output at Alternate Voltages

| Typical Heaters | 110 VAC | 120 VAC | 208 VAC | 240 VAC | 277 VAC |
|-----------------|---------|---------|---------|---------|---------|
| PFCH 4-1 | 3.3 | 4.0 | 12.0 | 16.0 | - |
| PFCH 6-1 | 5.0 | 6.0 | 18.0 | - | - |
| PFCH 9-1 | 7.5 | 9.0 | - | - | - |
| PFCH 10-2 | 2.1 | 2.5 | 7.5 | 10.0 | 13.0 |
| PFCH 15-2 | 3.1 | 3.8 | 11.3 | 15.0 | 20.0 |

Note: Dashed line indicates cable design failure at design specs



Maximum Circuit Length

| Sample Heaters | 0 Ft. | 50 Ft. | 100 Ft. | 150 Ft. | 200 Ft. | 250 Ft. | 300 Ft. | 400 Ft. | 500 Ft. |
|----------------|-------|--------|---------|---------|---------|---------|---------|---------|---------|
| PFCH 3-1 | 3.00 | 2.99 | 2.98 | 2.94 | 2.90 | 2.85 | 2.79 | 2.64 | 2.46 |
| PFCH 5-1 | 5.00 | 4.98 | 4.93 | 4.84 | 4.73 | 4.59 | 4.42 | 4.04 | 3.62 |
| PFCH 3-2 | 3.00 | 3.00 | 3.00 | 2.99 | 2.98 | 2.96 | 2.95 | 2.90 | 2.85 |
| PFCH 8-2 | 8.00 | 7.99 | 7.96 | 7.90 | 7.83 | 7.73 | 7.63 | 7.35 | 7.03 |
| PFCH 15-2 | 15.00 | 14.96 | 14.84 | 14.65 | 14.39 | 14.08 | 13.68 | - | - |
| PFCH 4-277 | 4.00 | 3.99 | 3.99 | 3.98 | 3.96 | 3.95 | 3.92 | 3.87 | 3.80 |
| PFCH 8-277 | 8.00 | 7.98 | 7.96 | 7.92 | 7.86 | 7.79 | 7.71 | 7.50 | 7.25 |

Note: Dashed line indicates drop off exceeds output minimums or amperage exceeds conductor limitations