



Description:

Nelson pre-insulated tubing bundles consist of single or dual 316 stainless steel process tubes traced with self-regulating heater cable, non-hygroscopic fiberglass insulation and an outer jacket of PVC or Urethane Elastomer. This system is designed to provide temperature maintenance or steam cleaning up to 250°F (121°C) at low ambient temperatures to -40°F (40°C).

Applications:

Impulse lines; flow transmitters, pressure transmitters, level transmitters and pressure switches, Sample lines; analyzers, Process lines; steam supply, condensate return, chemical feed and air lines. Designs are approved for use in Class I, Division 1 and 2, hazardous, classified locations. Designs for Zone 1 hazardous areas are also available

Heater Cable Performance and Ratings:

| Catalog Number | Service Voltage | Maximum Length | Maximum Maintenance Temperature | Maximum Intermittent Exposure | T-Rating* |
|----------------|-----------------|----------------|---------------------------------|-------------------------------|-----------|
| HLT3 | 120 | 395 | 250°F | 375°F | T3 (T3) |
| HLT23 | 208-277 | 785 | 250°F | 375°F | T3 (T3) |
| HLT5 | 120 | 310 | 250°F | 375°F | T3 (T3) |
| HLT25 | 208-277 | 620 | 250°F | 375°F | T3 (T3) |
| HLT8 | 120 | 225 | 250°F | 375°F | T3 (T3) |
| HLT28 | 208-277 | 460 | 250°F | 375°F | T3 (T3) |
| HLT10 | 120 | 190 | 250°F | 375°F | T3 (T3) |
| HLT210 | 208-277 | 375 | 250°F | 375°F | T3 (T3) |
| HLT12 | 120 | 170 | 250°F | 375°F | T3 (T3) |
| HLT212 | 208-277 | 335 | 250°F | 375°F | T3 (T3) |
| HLT15 | 120 | 135 | 250°F | 375°F | T3 (T3) |
| HLT215 | 208-277 | 270 | 250°F | 375°F | T3 (T3) |
| HLT18 | 120 | 125 | 250°F | 375°F | T3 (T3) |
| HLT218 | 208-277 | 245 | 250°F | 375°F | T3 (T3) |
| HLT20 | 120 | 105 | 250°F | 375°F | T3 (T2D) |
| HLT220 | 208-277 | 210 | 250°F | 375°F | T3 (T2D) |

* Electrical equipment T-rating codes define the maximum surface temperature that equipment will reach. It is used in hazardous (classified) area applications. Parenthesized T-ratings are determined at a 20% over voltage required for Class I, Division 1 applications.

Tube Bundle Specifications:

| Process Tube O.D. | Nominal Wt. LB/FT (KG/M) | Bundle O.D. IN (CM) | Nominal Dimensions IN (CM) |
|-------------------|--------------------------|---------------------|----------------------------|
| (1) - .250 IN | 0.4 (0.60) | 1.25 (3.2) | 1.1 (2.8) x 1.0 (2.5) |
| (1) - .375 IN | 0.5 (0.74) | 1.40 (3.6) | 1.3 (3.3) x 1.0 (2.5) |
| (1) - .500 IN | 0.6 (0.89) | 1.50 (3.8) | 1.4 (3.6) x 1.1 (2.8) |
| (2) - .250 IN | 0.5 (0.74) | 1.50 (3.8) | 1.3 (3.3) x 1.1 (2.8) |
| (2) - .375 IN | 0.7 (1.04) | 2.00 (5.1) | 1.5 (3.8) x 1.2 (3.0) |
| (2) - .500 IN | 1.0 (1.49) | 2.30 (5.8) | 1.7 (4.3) x 1.4 (3.6) |

* For other process tubes or cable, consult factory.

Self-Regulating Trace for High Temperature Maintenance Specification – Application Information

Pre-insulated Tubing Bundle

SELECTION TABLE

The selection table below allows for the proper specifying of Electric Trace Tubing

| | | | | | | | | | | |
|---|---|----|---|----|---|--------|---|---|----|--|
| 1 | S | 35 | P | 38 | - | THLT | 1 | 8 | CB | |
| | | | | | | | | | CB | SPECIFY HEATER CONSTRUCTION |
| | | | | | | | | | J | Tinned Copper Braid |
| | | | | | | | | | | Overjacketed Heater |
| | | | | | | | | | | SPECIFY WATTAGE |
| | | | | | | | | | 3 | 3 Watts per foot |
| | | | | | | | | | 5 | 5 Watts per foot |
| | | | | | | | | | 8 | 8 Watts per foot |
| | | | | | | | | | 10 | 10 Watts per foot |
| | | | | | | | | | 12 | 12 Watts per foot |
| | | | | | | | | | 15 | 15 Watts per foot |
| | | | | | | | | | 18 | 18 Watts per foot |
| | | | | | | | | | 20 | 20 Watts per foot |
| | | | | | | | | | | SPECIFY VOLTAGE |
| | | | | | | | | | 1 | 120 VAC |
| | | | | | | | | | 2 | 208-277 VAC |
| | | | | | | | | | | SPECIFY HEATER FAMILY |
| | | | | | | THLT | | | | Ordinary • Class I Division 2 • Zone 1 |
| | | | | | | D1THLT | | | | Class I, Division 1 |
| | | | | | | | | | | SPECIFY TUBE DIAMETER |
| | | | | 25 | | | | | | .25" O.D. |
| | | | | 38 | | | | | | .375" O.D. |
| | | | | 50 | | | | | | .50" O.D. |
| | | | | | | | | | | SPECIFY BUNDLE JACKET MATERIAL |
| | | | | | | P | | | | Black PVC |
| | | | | | | U | | | | Black Urethane Elastomer |
| | | | | | | | | | | SPECIFY TUBE WALL THICKNESS |
| | | | | 35 | | | | | | .035" Wall |
| | | | | 49 | | | | | | .049" Wall |
| | | | | | | | | | | SPECIFY TUBE CONSTRUCTION |
| | | | | | | S | | | | Seamless |
| | | | | | | W | | | | Welded |
| | | | | | | | | | | SPECIFY NUMBER OF TUBES |
| | | | | | | | | | 1 | Single Tube |
| | | | | | | | | | 2 | Dual Tube |

ACCESSORIES

- Division 2 Connection Kits for Power Connection and End Seals (Nelson PLT Series)
- Division 1 Connection Kits for Power Connection and End Connection (Nelson HASK Series)
- Zone 1 Connection Kits for Power Connection and End Connection (Nelson Z1 Series)
- Thermostatic Controls (Nelson TA, TH, TE and HC Series)
- Junction Boxes, End Boots, Entry Seals, Sealants, Patch Kits and Warning Signs
- Custom Control, Monitoring and Power Panels

Nelson Heat Tracing Systems products are supplied with a limited warranty. Complete Terms and Conditions may be found on Nelson's website at www.nelsonheaters.com.



NELSON HEAT TRACING SYSTEMS

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