

# NELSON™

## Self-Regulating Trace for Low Temperature Maintenance Specification – Application Information

### Pre-insulated Tubing Bundle



#### 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 freeze protection and temperature maintenance of 40°F (4.4°C) to 150°F (65°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, and Class II, 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*
LT3	120	325	150°F	185°F	T6
LT23	208-277	650	150°F	185°F	T6
LT5	120	270	150°F	185°F	T6
LT25	208-277	540	150°F	185°F	T6
LT8	120	210	150°F	185°F	T5
LT28	208-277	420	150°F	185°F	T5
LT10	120	180	150°F	185°F	T5
LT210	208-277	360	150°F	185°F	T5

\* Electrical equipment T-rating codes define the maximum surface temperature that equipment will reach. It is used in hazardous (classified) area applications.

#### Tube Bundle Specifications:

Process Tube O.D.	Nominal Wt. LB/FT (KG/M)	Bundle O.D. IN (CM)
(1) - .250 IN	0.4 (0.60)	1.25 (3.2)
(1) - .375 IN	0.5 (0.74)	1.40 (3.6)
(1) - .500 IN	0.6 (0.89)	1.50 (3.8)
(2) - .250 IN	0.5 (0.74)	1.50 (3.8)
(2) - .375 IN	0.7 (1.04)	2.00 (5.1)
(2) - .500 IN	1.0 (1.49)	2.30 (5.8)

\* For other process tubes or cable, consult factory.

