

Switch Heating



FLAT MI - CONSTANT WATTAGE HEATING SYSTEM

PRODUCT OVERVIEW

Railway switches are a critical part of safe, reliable railway operations. During the winter months, snow and ice build-up on track can prevent switches from properly aligning, posing a major challenge to rail networks throughout the world. nVent offers solutions for melting snow and ice on track switches, including our line of Flat MI Constant Wattage Switch Point Heating Systems. This service proven solution features a flat MI (mineral insulated) heating element capable of covering more rail surface area than conventional tubular heating systems. By efficiently transferring heat, the nVent Flat MI Constant Wattage Switch Point Heating System operates at a steady temperature curve, consuming less energy, lowering the overall cost of ownership. Securing the heating cable in place are proprietary nVent ERICO rail clips, specifically designed for use in rail heating applications. nVent provides custom switch point heating system designs to meet the unique needs railways throughout the world.

FEATURES & BENEFITS

- **Energy Efficiency**
 - Efficient heat transfer reduces power consumption by as much as 40% compared to conventional tubular heaters
- **Ease of Use & Value Added Options**
 - Installation is quick and does not require loosening or removal of the braces
 - 50% less wiring, cable accessories and junction boxes as compared to tubular heaters
 - No requirement to remove elements for switch maintenance
 - Quick and easy connections available
 - Many combinations of power output, voltages, and lengths
 - Optional Integrated control system, hard-wired or RF Control options that result in significant energy savings
- **Durability**
 - Operating at lower temperatures allows for a longer service life- Resists shock and vibration- Minimal expansion under load – less than 1 in. per 20 ft.



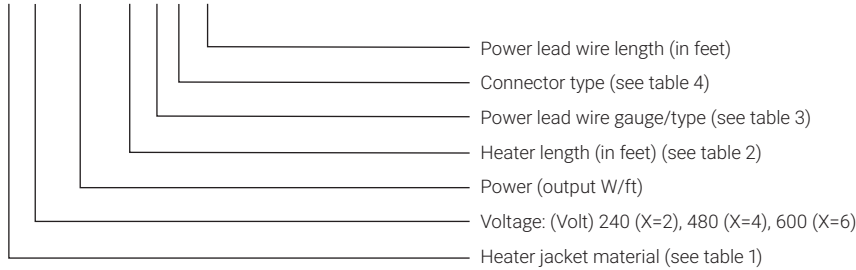
SPECIFICATIONS (NOMINAL)

Power Output	75 - 250 W/ft at 32°F (0°C)
Voltage	240 - 480 VAC / 600 VDC
Minimum Installation Temperature	0°F (-18°C)
Heater Dimensions	Width: 0.63 in. (16 mm) Thickness: 0.22 in. (5.5 mm)

HEATING CABLE CATALOG NUMBER AND ORDERING INFORMATION

To order a RAYCHEM switch point heating cable, it is important to understand the format of our catalog number.

RHP-X-X-WWW-LL-X-X-XX



EXAMPLE PART NUMBER: RHPS425018212

*Actual part numbers are not separated by dashes

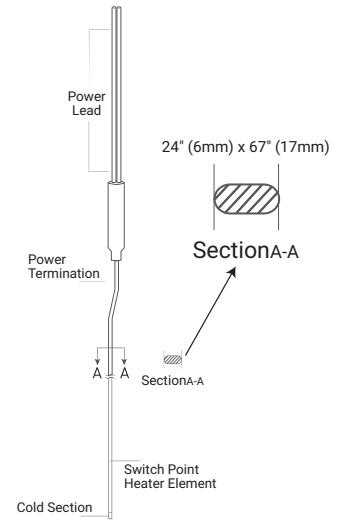


Table 1: Heater Jacket Material

Option	Heater Jacket Material
N	Inconel™
S	Stainless Steel

Table 2: Standard Heater Length (ft)

Option	Heater Length (ft)/ (m)
8	8' / 2.44 (m)
10	10' / 3.05 (m)
12	12' / 3.66 (m)
14	14' / 4.27 (m)
16	16' / 4.88 (m)
18	18' / 5.49 (m)
20	20' / 6.1 (m)
22	22' / 6.71 (m)
26	26' / 7.93 (m)
34	34' / 10.36 (m)

Table 3: Lead wire AWG/Type

Option	LEAD WIRE AWG/TYPE
1	8 AWG, Cross linked polyolefin (XLPO)
2	6 AWG, Cross linked polyolefin (XLPO)
3	8 AWG, Chlorinated polyethylene (CPE)

Table 4: Connector Type

Option	Connector Description
0	No connector
1	Male w/Black Female Boot, 600 V
2	Male w/Red Female Boot, 600 V
3	Male w/Green Female Boot, 600 V

APPROVALS

nVent Constant Wattage switch point heaters meet the requirements of the U.S. National Electrical Code and the Canadian Electrical Code. The switch point heaters can be offered as a part of an integrated system with optimized energy efficient design for each rail type and operating conditions. The system includes rail clips and attachment hardware, fuse boxes and telemetry and controls. For additional information and complimentary options contact your nVent rail representative or call (800) 545-6258.

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