

Heat Tracing Products

Application & Selection Guidelines

General Product Summary

This section is designed to assist you in determining the appropriate cable for use in your application.

Step 1 — Collect Required Application Data and Determine Heat Loss

Step 2 — Choose the cable that best meets your specific application parameters based on the summary. Consideration of application temperature, exposure temperature, application requirements and environmental ratings should be made.

Step 3 — Select Heating Cable Wattage Rating

Step 4 — Determine Total Cable Required

Step 5 — Determine Circuits and Circuit Protection

Step 6 — Select Appropriate Accessories

Step 1 — Collect Required Application Data & Determine Heat Loss

Application data required can be split into two categories. The first is the heat loss data. This includes:

- Maintenance Temperature
- Minimum Ambient Temperature
- Pipe Size
- Insulation Type (or K factor)
- Insulation Thickness
- Indoor/Outdoor Installation
- Maximum Expected Wind Speed
- Required Safety Factor.

Refer to the Technical section of this catalog, "Determining Heat Energy Requirements — Pipe & Tank Tracing" for details on

performing heat loss calculations. For Commercial Freeze Protection, please see Cable Selection Tables in this section.

The second category of data required is the application and environmental conditions. This includes:

- Maximum Exposure Temperature (Power Off Condition)
- Circuit Length Considerations
- Available Voltage
- Hazardous Area Requirements
- Type of Pipe (Plastic or Metal)
- Chemical Exposure
- Fire Resistance.

Step 2 — Select the Cable

Choose the cable that best fits your specific application parameters and wattage requirements.

Heat Tracing Product Features

Features	Industrial					Alloy 825 MI	Commercial		
	SRL	SRP	SRM/E	CWM	SLL		SRF	SRF-RG	HWM
Max. Maintenance Temp. (°F)	150	225	302	320	302	900	100	50	225
Max. Exposure Temp. (°F) Power Off	185	275	420	400	450	1,100	185	185	275
Max. W/Ft.	10	15	20	12	12	50	8	12	15
Max. Circuit Length (Ft.)	95-660	55-750	150-750	225-900	7,500	330-1,000	180-660	135-540	500-800
Buss Wire Size	16	16	16	12	16,14,12,10	N/A	16	16	16
Voltages	120, 208-277	120, 208-270	120, 208-277	120, 208-277, 480	120-600	Up to 600	120, 208-277	120, 208-277	120, 208-270
Hazardous Ratings	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Usable on Plastic Pipe	Yes	No	No	No	No	No	Yes	Yes	Yes
Cut-to-Length in Field	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Field Splicable	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Can be Overlapped	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
Output Varies with Temp.	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
Varies Output Along Length	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
Design of System	Simple	Simple	Simple	Simple	Involved	Involved	Simple	Simple	Simple
Installation of System	Easiest	Easiest	Easiest	Simple	Simple	Involved	Easiest	Easiest	Easiest
Fire Resistance	Fair	Fair	Fair	Fair	Fair	Excellent	Fair	Fair	Fair
Chemical Resistance	See Corrosion Guide, next page								
Size (Max. In.)	.435x.185	.435x.185	.435x.185	.435x.235	.435x.185	0.4	.435x.185	.435x.185	.435x.185
Accessories	DL/EL/U	D/UL	DL/U	DL/EL/U	U		DL/EL/U	RG Access.	DL/U
Monitor Wire Available	Yes	Yes	Contact Factory	Contact Factory	No	No	No	No	Yes
Applications	FL,PL	FL,FH, PL,PH	FL,FH, PL,PH	FL,FH, PL,PH	FL,FH, PL,PH	FL,FH, PL,PH	FL	RG	HWM
	FL = Freeze Protection FH = Freeze Protection, High Exposure Temp. PL = Process Maintenance, Low Temperature					PH = Process Maintenance RG = Roof and Gutter De-icing HWM = Hot Water Maintenance	High Temperature Freeze Protection		