

# SSFR

## SELF-REGULATING FREEZE PROTECTION CABLE REEL



### MELT AWAY YOUR WORRIES

SSFR heating cable increases or decreases the heat output in a self-regulating way depending on changes in the ambient temperature, so a thermostat may not be necessary in some applications. It will never overheat or burn out even when overlapped. This heating cable reel is available with optional termination, power connection, splice and tee kits to reduce installation time and require no special tools.

#### ENERGY EFFICIENT

AUTOMATICALLY VARIES ITS POWER OUTPUT IN RESPONSE TO TEMPERATURE CHANGES

#### EASY TO INSTALL

CAN BE CUT TO ANY LENGTH (UP TO MAXIMUM CIRCUIT LENGTH) REQUIRED ON SITE WITH NO WASTED CABLE

#### SAFE

EVEN WHEN OVERLAPPED

#### POWER CONNECTION, SPLICE, TEE AND END SEAL KIT

REDUCES INSTALLATION TIME

#### MANUFACTURING

- normal cable width 0.42 in. (10.6 mm)
- normal cable thickness 0.23 in. (5.8 mm)
- cable bus wire gauge 16 AWG

#### WATTAGE

- 5 W/ft, 8 W/ft, 10 W/ft

#### INSTALLATION

- maximum exposure temperature is 85 °C (185 °F)
- Minimum installation temperature -40 °C (-40 °F)

#### WARRANTY

- two years

#### IDEAL FOR:

pipes at risk of freezing and roofs and gutters with ice damming problems

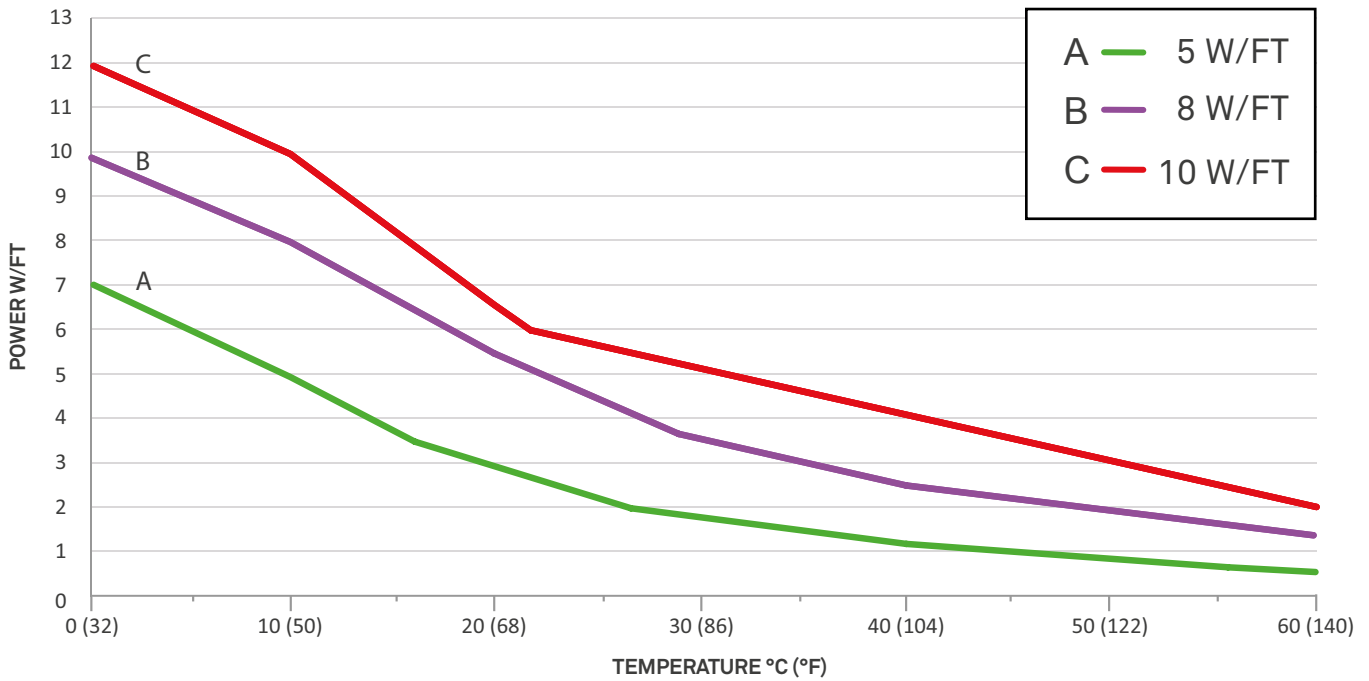


# TECHNICAL SPECIFICATIONS

| PRODUCT          | LENGTH | POWER OUTPUT |
|------------------|--------|--------------|
| CODE             | FT     | WATTS        |
| <b>120 VOLTS</b> |        |              |
| SSFR1W05L1000    | 1000   | 5            |
| SSFR1W08L1000    | 1000   | 8            |
| SSFR1W05L0500    | 500    | 5            |
| SSFR1W08L0500    | 500    | 8            |
| <b>240 VOLTS</b> |        |              |
| SSFR2W05L1000    | 1000   | 5            |
| SSFR2W08L1000    | 1000   | 8            |
| SSFR2W10L1000    | 1000   | 10           |
| SSFR2W05L0500    | 500    | 5            |
| SSFR2W08L0500    | 500    | 8            |
| SSFR2W10L0500    | 500    | 10           |

## POWER OUTPUT CURVES

Nominal power output at nominal voltage (120 V or 240 V) when SSFR heating cable installed on insulated metal pipes.



## ADJUSTMENT FACTORS

| POWER<br>W/FT | POWER OUTPUT |       | CIRCUIT LENGTH |       |
|---------------|--------------|-------|----------------|-------|
|               | 208 V        | 277 V | 208 V          | 277 V |
| 5             | 0.85         | 1.12  | 0.94           | 1.09  |
| 8             | 0.89         | 1.08  | 0.93           | 1.11  |
| 10            | 0.89         | 1.08  | 0.92           | 1.11  |

## MAXIMUM CIRCUIT LENGTH PER CIRCUIT BREAKER

| POWER | AMBIENT TEMPERATURE AT START-UP |     | 120 V |      |      |      | 240 V |      |      |      |
|-------|---------------------------------|-----|-------|------|------|------|-------|------|------|------|
|       |                                 |     | 15 A  | 20 A | 30 A | 40 A | 15 A  | 20 A | 30 A | 40 A |
| W/FT  | °F                              | °C  | FT    |      |      |      | FT    |      |      |      |
| 5     | 50                              | 10  | 230   | 270  | 270  | 270  | 460   | 540  | 540  | 540  |
|       | 32                              | 0   | 230   | 270  | 270  | 270  | 460   | 540  | 540  | 540  |
|       | 14                              | -10 | 180   | 210  | 270  | 270  | 360   | 420  | 540  | 540  |
|       | 0                               | -18 | 140   | 190  | 270  | 270  | 285   | 380  | 540  | 540  |
|       | -20                             | -29 | 125   | 165  | 250  | 270  | 250   | 330  | 500  | 540  |
|       | -40                             | -40 | 110   | 145  | 220  | 270  | 220   | 295  | 420  | 540  |
| 8     | 50                              | 10  | 150   | 200  | 210  | 210  | 300   | 400  | 420  | 420  |
|       | 32                              | 0   | 150   | 200  | 210  | 210  | 300   | 400  | 420  | 420  |
|       | 14                              | -10 | 140   | 150  | 205  | 210  | 280   | 300  | 410  | 420  |
|       | 0                               | -18 | 100   | 130  | 200  | 210  | 200   | 265  | 400  | 420  |
|       | -20                             | -29 | 85    | 115  | 175  | 210  | 175   | 235  | 350  | 420  |
|       | -40                             | -40 | 80    | 105  | 155  | 210  | 155   | 210  | 315  | 420  |
| 10    | 50                              | 10  | 120   | 160  | 180  | 180  | 240   | 315  | 360  | 360  |
|       | 32                              | 0   | 105   | 140  | 170  | 180  | 210   | 280  | 340  | 360  |
|       | 14                              | -10 | 95    | 125  | 165  | 180  | 190   | 250  | 330  | 360  |
|       | 0                               | -18 | 80    | 110  | 160  | 180  | 160   | 215  | 325  | 360  |
|       | -20                             | -29 | 70    | 95   | 140  | 180  | 145   | 190  | 285  | 360  |
|       | -40                             | -40 | 60    | 85   | 125  | 170  | 125   | 170  | 255  | 340  |

## ACCESSORIES

| PRODUCT        | DESCRIPTION   |
|----------------|---|
| SSFR-ALUTAPE   | aluminum adhesive foil tape   |
| SSFR-FIBTAPE   | fiberglass adhesive tape  |
| SSFR00         | power connection kit for SSFR cable   |
| SSFR03         | fiberglass adhesive tape and warning labels   |
| SSFR08         | plug-in power connection with GFCI kit for SSFR cable   |
| SSFR10         | splice and tee kit for SSFR cable   |
| SSFR12         | end seal kit for SSFR cable   |
| SSFR13         | roof clips for SSFP/SSFR cables (Kit of 10)   |
| SSFR14         | roof clips for SSFP/SSFR cables (Kit of 50)   |
| SSFR15         | downspout cable hanger bracket for SSFP/SSFR cables   |
| SSFR-ENDSEAL   | commercial end seal kit for SSFR cable  |
| SSFR-SPLICE    | commercial splice connection kit for SSFR cable   |
| SSFR-TEE       | commercial tee connection kit for SSFR cable  |
| SSFR-JBOX      | commercial junction box for SSFR cable  |
| FPT130         | electronic controller NEMA 4, 30 A @ 100V - 277 V with GFI 30 mA, setpoint selection -1 °C, 3 °C, 7 °C ou 10 °C (30 °F, 38 °F, 45 °F or 50 °F) awith 20 ft (6 m) sensor |
| TPR-L1N-3X-Q10 | thermostat NEMA 4, 22 A resistive @ 125 V/250 V/480 V, fixed setpoint at 4 °C (40 °F) with 3 ft (0.9 m) tin plated copper capillary                                     |
| TRF115-005     | thermostat NEMA 4, 25 A resistive @ 120 V/208 V/240 V/277 V, -18 °C to 49 °C (0 °F to 120 °F) with 5 ft (1.5 m) stainless steel capillary                               |
| GFPRO          | electronic controller NEMA 4, 30 A @ 100 V - 277 V resistive with GFI 30 mA, 2 sensor inputs for GIT-1 sensor   |
| PDPRO          | electronic controller NEMA 4, 30 A @ 100 V - 277 V resistive, 2 sensor inputs for GIT-1 sensor  |
| GIT-1          | roof and gutter temperature and moisture sensor for GFPRO and PDPRO, stepoint at 3 °C (38 °F)   |
| DS-8C          | controller with aerial temperature and moisture deported 10 ft (3 m) sensor, 30 A @ 100 - 277 V   |
| DS-9C          | controller with aerial temperature and moisture deported 10 ft (3 m) sensor, 2 circuits of 30 A @ 100 - 277 V   |

# TECHNICAL DRAWINGS

