

106 Twin Terrace Way Spring Branch, Texas 78070-6288

Phone: 830-438-3808 Email: sales@trans-heat.com Web: trans-heat.com

Romans 10:11 For whosoever believes on Him shall not be ashamed.

heat tracing specialists

3

TSL

SELF-REGULATING

◄ FM ►



5



- 2. Conductive Core
- 3. Polyolefin Jacket
- 4. Tinned Copper Braid
- 5. Optional Overjacket

Heat Trace

TSL low temperature self-regulating heater cable regulates it's heat output throughout the entire length of the circuit in response to ambient temperature changes. The self-regulating core increases its heat output as the ambient temperature drops; and decreases its output as the temperature rises. TSL self-regulating heater cables are constructed of industrial grade materials and are approved for use in Division 1* & 2 hazardous areas. TSL heater cables can maintain temperatures up to 150°F and have an intermittent exposure temperature of 185°F when energized. The optional thermoplastic R jacket offers corrosion resistance against certain inorganic chemicals, while the fluoropolymer T jacket protects the cable from both organic and inorganic chemicals. Either jacket offers exceptional protection against impact damage, abrasion and wet environments. As with all parallel type heater cables TSL can be cut to length in the field using standard electrical tools and will not overheat or burnout when overlapped.

TSL self-regulating heater cables provide freeze protection and process temperature maintenance for fluid transport and storage systems. TSL self-regulating heater cables are also ideal for roof & gutter, snow-melting/de-icing, cryogenic, fire suppression, domestic hot-water and various other applications. TSL cables are also safe for use on plastic pipes up to 5 W/Ft.*

* Use of conductive media such as foil tapes and heat transfer mastic highly recommended.



| Example Configuration | | TSL 8-1 R | | Weight/1000' | | Dimensions | |
|-----------------------|-------------------------|-----------|------------------------|--------------|----------|-------------|-------------|
| TSL | Wattage | Voltage | Braid/Jacket | 3W-5W | 8W-10W | 3W-5W | 8W-10W |
| *HTSL | 3, 5, 8, 10 | 1=120V | C=Tinned Copper Braid | 73 Lbs. | 80 Lbs. | | |
| T Rating | T-6 (3, 5, 8 W) T-5 (10 | 2=240V | R=Rubber Jacket | 87 Lbs. | 94 Lbs. | .446″x.267″ | .520″x.247″ |
| | W) | | T=Fluoropolymer Jacket | 93 Lbs. | 100 Lbs. | .436″x.250″ | .510″x.230″ |

* HTSL cables must be configured with a T jacket by default. Factory Mutual requires criteria form to be completed before ordering HTSL. T rating per 1999 NEC Table 500-5(d).

| RPC-X | Power Connection Kit |
|--------|----------------------------|
| RSL-X | 20-277V Monitor Light Kit |
| RTC-X | Multi-Entry Kit |
| A419 | Snow Melt Controller |
| AL-1 | Aluminum Tape |
| FG-1 | Fiberglass Tape |
| TD-1 | Snap Action Thermostat |
| TF115 | Ambient Sensing Thermostat |
| TRF115 | Line Sensing Thermostat |
| | |

Note: Not all accessories are listed. See catalog for additional listings.

| Typical Heaters | 208 VAC | 220 VAC | 240 VAC | 277 VAC |
|------------------|---------|---------|---------|---------|
| TSL 3-2 | 2.25 | 2.65 | 3.00 | 3.84 |
| A TSL 5-2 | 4.30 | 4.67 | 5.00 | 5.80 |
| TSL 8-2 | 7.28 | 7.66 | 8.00 | 8.80 |
| TSL 10-2 | 9.30 | 9.67 | 10.0 | 10.8 |



To minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed, and to comply with **National Electric Code (NEC) Article 427.22** requirements, agency certifications, and local codes, ground-fault equipment protection must be used on each heating cable branch circuit. Arcing may not be stopped by conventional circuit protection. Ground fault protection is the responsibility of the end user and should be installed by a certified electrican.

Lit is highly recommended that all heat trace systems be connected to a control device to limit inrush potential and circuit breaker issues. Control devices also extend the life of all heat trace systems.

| 30A | 40A | 15A | 204 | | | | | | |
|-----|-------------------------------|---|---|--|--|---|--|--|---|
| | | | 20A | 30A | 40A | 15A | 20A | 30A | 40A |
| NR | NR | 200 | 270 | 330 | NR | 180 | 230 | 330 | NR |
| NR | NR | 410 | 560 | 660 | NR | 360 | 480 | 660 | NR |
| NR | NR | 150 | 200 | 270 | NR | 130 | 175 | 260 | 270 |
| NR | NR | 300 | 400 | 540 | NR | 260 | 345 | 520 | 540 |
| 210 | NR | 95 | 125 | 190 | 210 | 85 | 100 | 170 | 210 |
| 420 | NR | 195 | 250 | 375 | 420 | 170 | 225 | 340 | 420 |
| 180 | NR | 70 | 95 | 145 | 180 | 60 | 85 | 120 | 165 |
| 360 | NR | 150 | 200 | 300 | 360 | 130 | 175 | 260 | 360 |
| | NR NR NR NR 210 420 180 360 1 | NR NR NR NR NR NR 210 NR 420 NR 180 NR 360 NR | NR NR 200 NR NR 410 NR NR 150 NR NR 300 210 NR 95 420 NR 195 180 NR 70 360 NR 150 | NR NR 200 270 NR NR 410 560 NR NR 150 200 NR NR 150 200 NR NR 300 400 210 NR 95 125 420 NR 195 250 180 NR 70 95 360 NR 150 200 | NR NR 200 270 330 NR NR 410 560 660 NR NR 150 200 270 NR NR 150 200 270 NR NR 300 400 540 210 NR 95 125 190 420 NR 195 250 375 180 NR 70 95 145 360 NR 150 200 300 | NR NR 200 270 330 NR NR NR 410 560 660 NR NR NR 150 200 270 NR NR NR 150 200 270 NR NR NR 300 400 540 NR 210 NR 95 125 190 210 420 NR 195 250 375 420 180 NR 70 95 145 180 360 NR 150 200 300 360 | NR NR 200 270 330 NR 180 NR NR 410 560 660 NR 360 NR NR 150 200 270 NR 130 NR NR 150 200 270 NR 130 NR NR 150 200 270 NR 130 NR NR 300 400 540 NR 260 210 NR 95 125 190 210 85 420 NR 195 250 375 420 170 180 NR 70 95 145 180 60 360 NR 150 200 300 360 130 | NR NR 200 270 330 NR 180 230 NR NR 410 560 660 NR 360 480 NR NR 150 200 270 NR 130 175 NR NR 150 200 270 NR 130 175 NR NR 300 400 540 NR 260 345 210 NR 95 125 190 210 85 100 420 NR 195 250 375 420 170 225 180 NR 70 95 145 180 60 85 360 NR 150 200 300 360 130 175 | NR NR 200 270 330 NR 180 230 330 NR NR 410 560 660 NR 360 480 660 NR NR 150 200 270 NR 130 175 260 NR NR 300 400 540 NR 260 345 520 210 NR 95 125 190 210 85 100 170 420 NR 195 250 375 420 170 225 340 180 NR 70 95 145 180 60 85 120 360 NR 150 200 300 360 130 175 260 |

NR= *Not Required. Maximum circuit length has been achieved using smaller size breaker.*

©2020 Trans-Heat, LLC.

TSL06012020 Rev 1