TRANS-HEAT, LLC.

heat tracing specialists

106 Twin Terrace Way
Spring Branch, Texas 78070-6288

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

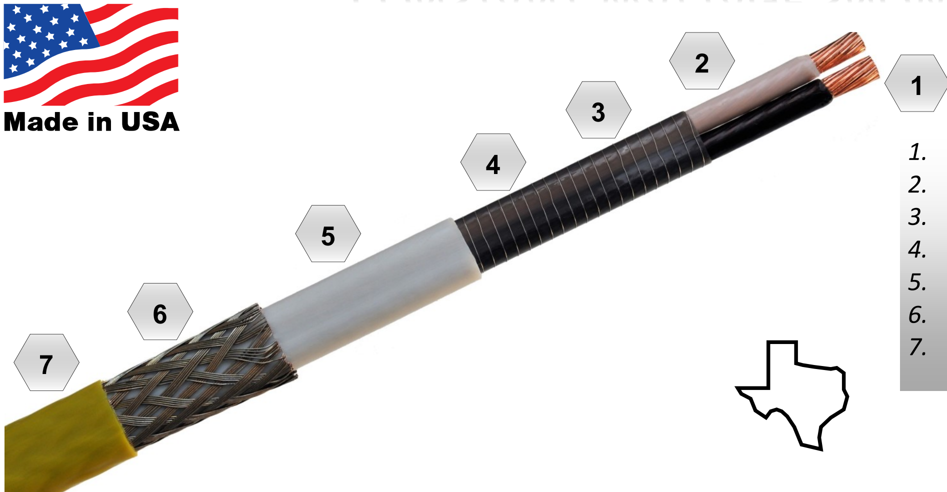
*Romans 10:11 For whosoever believes on Him shall not be ashamed.*

# SM-C

## CONSTANT WATTAGE SNOW MELT

Heat Trace

**Made in USA**




1. *12 AWG Buss Wires*
2. *10 mils Insulation*
3. *10 mils Insulation*
4. *Resistance Wire*
5. *22 mils Insulation*
6. *Ground Braid*
7. *20 mils Overjacket*

## DESCRIPTION

*SM-C snow melting cable is a constant wattage, parallel-resistance electric heater that provides constant power output along the entire length of cable. SM-C snow melting cable is constructed of 12AWG bright copper buss wires which allow for exceptionally long circuit lengths. The fluoropolymer insulation protects the cable from high exposure temperatures which makes it ideal for all asphalt installations. It also sufficiently protects the cable during installation and when encapsulated in concrete/asphalt.*

*Unlike other snow melting brands on the market that use low temperature PVC for insulation SM-C cables offer extreme durability, ruggedness, and withstands the harshest conditions. SM-C cables offers mineral insulated type longevity for less than leading brand snow melting mats. The quality of SM-C cable is unparalleled and offers much more than typical mats. SM-C cables conform to any type area to be traced. Simply spool off cable, attach to mesh and terminate. No need for distributors to stock or order 15-20 different mat sizes.*

*SM-C cables generate 45W/Ft.² on 6" centers and can be spaced as far apart as 9" for an efficient radiating pattern that eliminates ice-ridging or striping of un-melted snow/ice. SM-C cables can be paired with any number of mechanical, electronic snow melting controls for an energy efficient, reliable system.*

## APPLICATIONS

*SM-C snow melting cables can be used in all direct burial concrete applications where cable is 1-1/2"-2" below grade. SM-C cable is ideally suited for all asphalt installations where high exposure temperature is a concern. Most mat heaters, snow melting cables cannot withstand asphalt application temperatures which result in cable destruction or degraded system performance due to weakened dielectic. This is because other manufacturers use low cost insulating materials in their construction. SM-C cables can be used in all classes of snow melting!*

## ORDERING INFO

| *Example Configuration* | | | *SM-24C* | |
|---|---|---|---|---|
| *SM-C* | *Voltage* | | *Weight/Lbs.* | |
| | *12=120V* | *27=277V* | *500’=47* | |
| | *28=208V* | *37=347V* | *1,000’=92* | |
| | *22=220V* | *48=480V* | *1,500’=140* | |
| | *24=240V* | | | |

*Note: Standard put-ups 500’, 1,000’, 1,500’. 120-277V/36” zones. 347-480V/48” zones. Min. order 500’.*

## CIRCUIT LENGTH/BREAKER SIZE

| *Voltage* | *Table 4* ***SM-C Circuit Lengths vs. Breaker Sizing (P)*** | | | | |
|---|---|---|---|---|---|
| | *15A (23)* | *20A (22)* | *30A (21)* | *40A (20)* | *50A (18)* |
| *208VAC* | ***110*** | ***140*** | ***200*** | ***300*** | ***400*** |
| *240VAC* | ***120*** | ***170*** | ***250*** | ***350*** | ***450*** |
| *277VAC* | ***140*** | ***190*** | ***300*** | ***400*** | ***500*** |

*Note: P=Heating cable output at the end-of-circuit. Determine spacing with these outputs. Circuit lengths are based on 20% breaker de-rating per National Electric Code.*

## ACCESSORIES

| | |
|---|---|
| ***SMC-TK*** | *Termination Kit for SM-C* |
| ***SMC-SK*** | *Splice Kit for SM-C* |
| ***CT-1*** | *Cable Ties (50/Pack)* |
| ***RPC-SM*** | *Power Connection Kit for SM* |
| ***RTC-SM*** | *Multi-Entry Kit for SM* |
| ***AIC-4*** | *Snow Melting Control 10A* |
| ***RSD4.5*** | *Snow Melting Control 50A* |
| | |
| | |

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

*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 electrician.*

*It 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.*

## MAX CIRCUIT LENGTH

| ***Heaters*** | ***0’*** | ***50’*** | ***100’*** | ***150’*** | ***200’*** | ***250’*** | ***300’*** | ***350’*** | ***400’*** | ***500’*** | ***600’*** | ***650’*** | ***700’*** | ***800’*** | ***900’*** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***SM-12C*** | *23.0* | *22.68* | *21.79* | *20.42* | *18.73* | — | — | — | — | — | — | — | — | — | — |
| ***SM-28C*** | *23.0* | *22.89* | *22.58* | *22.09* | *21.43* | *20.62* | *19.7* | *18.69* | *17.61* | — | — | — | — | — | — |
| ***SM-22C*** | *23.0* | *22.9* | *22.63* | *22.19* | *21.59* | *20.86* | *20.01* | *19.08* | *18.08* | — | — | — | — | — | — |
| ***SM-24C*** | *23.0* | *22.92* | *22.69* | *22.31* | *21.8* | *21.18* | *20.45* | *19.64* | *18.76* | — | — | — | — | — | — |
| ***SM-27C*** | *23.0* | *22.93* | *22.76* | *22.48* | *22.09* | *21.61* | *21.04* | *20.4* | *19.7* | *18.15* | — | — | — | — | — |
| ***SM-48C*** | *23.0* | *22.98* | *22.93* | *22.85* | *22.74* | *22.59* | *22.4* | *22.22* | *22.0* | *21.45* | *20.82* | *20.48* | *20.12* | *19.34* | *18.52* |

*Note: Circuit lengths based on 50A breaker with 20% de-rating. Dashed line indicates drop off exceeds output minimums or amperage exceeds breaker safety envelope. To determine circuit lengths using smaller breaker sizes interpolate from chart and de-rate breaker by 20%.*