

Series Resistance Heating Cables

SCW HEATING SYSTEM

- High chemical resistance
- For all type industries
- High operating temperature
- May be used in liquids
- Highly flexible
- Small bending radius
- Easy to install and maintenance
- Moisture protected
- High loading
- For all type of application

UL Listed



Heatrace
Electric Heating Products

Pipe line temperature maintenance
Pipe line freeze protection
Tank, Vessel, Instrument tracing

SCW is preferred where flexible series cables are desirable or when heated lengths exceed the limitations of cut to length cables.

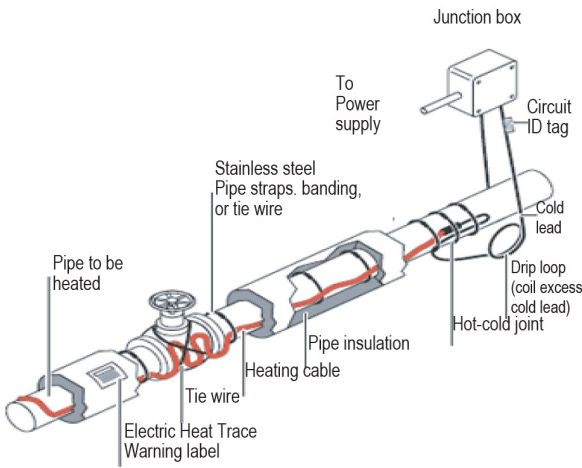
SCW series resistance heating cable is functioned by the heat output from the core, circuit lengths up to 18000 feet can be energized from a single power supply point.

The series circuitry of SCW provides consistent watt-perfoot power output along the entire length of the cable with no voltage drop.

SCW series withstands the temperature exposure associated with steam purging.

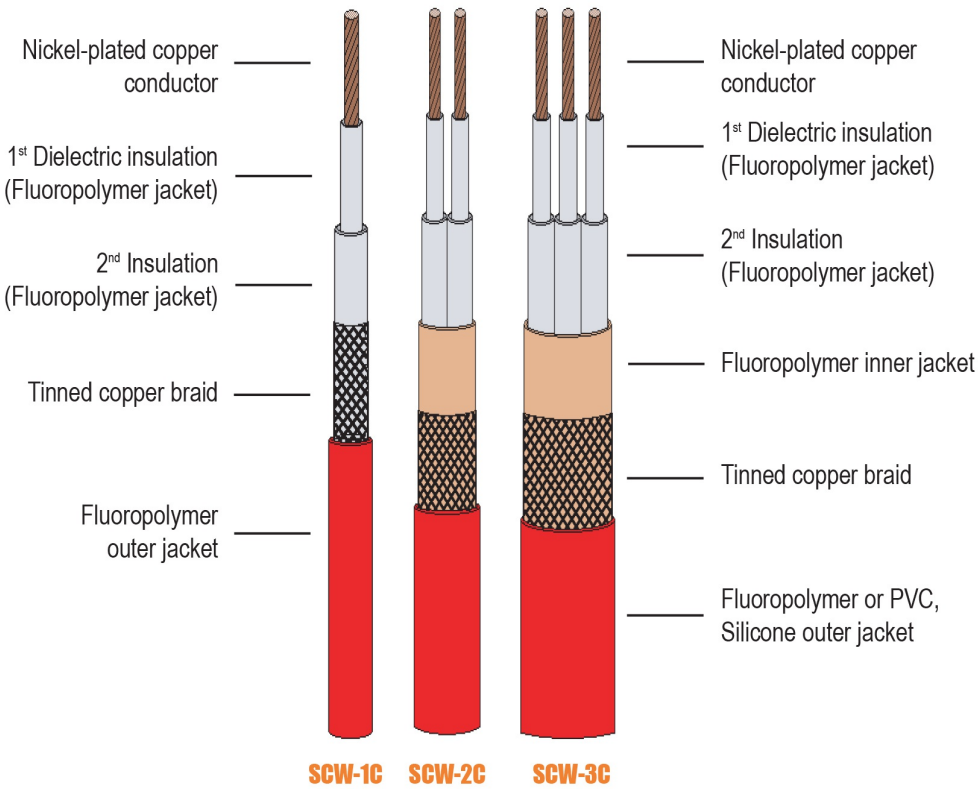
Heatrace SCW is light weight, easy to install and provides proven long term performance and reliability.

SCW cables are approved for use in ordinary and hazardous area.



Series Resistance Heating Cables

SCW Heating Cable Construction



Ordering Information

SCWL	-	3C	-	5.0	-	SB	-	F	
									Type of insulation layer : F - Fluoropolymer, P - PFA V - Thermal resistance PVC S - Thermal resistance silicone
									Tinned copper braid
									Resistance or conductor size : mm ²
									Number of conductor : 1C-single, 2C-double, 3C-triple
									Series type heating cable (L - long line)

Series Resistance Heating Cables

SCW Heating Cable Construction

1. SCW Technical Parameter

1-1. Single Core (1 conductor) / Rated Voltage 600V

Model No.	Resistance (Ω =/m)	O.D (mm)	Heating Wire	Temperature Coefficient (1 / 100K)
SCW-1C-00117-SBP	0.0117	5.0	Stranded	1.43
SCW-1C-00263-SBP	0.0263	5.2	Stranded	1.43
SCW-1C-00340-SBP	0.0340	5.0	Stranded	1.43
SCW-1C-00500-SBP	0.0500	4.8	Stranded	1.30
SCW-1C-00650-SBP	0.0650	5.0	Stranded	1.30
SCW-1C-00800-SBP	0.0800	4.9	Stranded	1.30
SCW-1C-01000-SBP	0.1000	4.8	Stranded	1.04
SCW-1C-01400-SBP	0.1400	4.8	Stranded	1.04
SCW-1C-01600-SBP	0.1600	4.7	Stranded	1.04
SCW-1C-02000-SBP	0.2000	5.0	Stranded	1.04
SCW-1C-02600-SBP	0.2600	4.8	Stranded	1.04
SCW-1C-03400-SBP	0.3400	4.6	Stranded	1.04
SCW-1C-04300-SBP	0.4300	4.8	Stranded	1.0018
SCW-1C-05100-SBP	0.5100	4.7	Stranded	1.0018
SCW-1C-06800-SBP	0.6800	5.1	Stranded	1.0018
SCW-1C-08500-SBP	0.8500	4.6	Stranded	1.0018
SCW-1C-10000-SBP	1.0000	4.4	Stranded	1.0
SCW-1C-12500-SBP	1.2500	4.4	Stranded	1.0
SCW-1C-14400-SBP	1.4400	4.6	Stranded	1.0
SCW-1C-17500-SBP	1.7500	4.4	Stranded	1.0
SCW-1C-20600-SBP	2.0600	4.5	Stranded	1.029
SCW-1C-25000-SBP	2.5000	4.4	Stranded	1.029
SCW-1C-31000-SBP	3.1000	4.4	Stranded	1.04
SCW-1C-40000-SBP	4.0000	4.4	Stranded	1.04
SCW-1C-44000-SBP	4.4000	4.3	Stranded	1.018
SCW-1C-47000-SBP	4.7000	4.3	Stranded	1.018
SCW-1C-57000-SBP	5.7000	4.2	Stranded	1.018
SCW-1C-0007K-SBP	7.0000	3.7	Spirally wound	1.018

SCW-1C-0009K-SBP	9.00	3.7	Spirally wound	1.018
SCW-1C-0011K-SBP	11.00	3.6	Spirally wound	1.018
SCW-1C-0013K-SBP	13.00	3.6	Spirally wound	1.0
SCW-1C-0015K-SBP	15.00	3.6	Spirally wound	1.0
SCW-1C-0020K-SBP	20.00	3.6	Spirally wound	1.0
SCW-1C-0025K-SBP	25.00	3.6	Spirally wound	1.0
SCW-1C-0030K-SBP	30.00	3.6	Spirally wound	1.0
SCW-1C-0040K-SBP	40.00	3.6	Spirally wound	1.0
SCW-1C-0050K-SBP	50.00	3.6	Spirally wound	1.0
SCW-1C-0060K-SBP	60.00	3.6	Spirally wound	1.0
SCW-1C-0080K-SBP	80.00	3.6	Spirally wound	1.0
SCW-1C-0100K-SBP	100.00	3.6	Spirally wound	1.006
SCW-1C-0117K-SBP	117.00	3.6	Spirally wound	1.029
SCW-1C-0160K-SBP	160.00	3.6	Spirally wound	1.029
SCW-1C-0200K-SBP	200.00	3.6	Spirally wound	1.006
SCW-1C-0300K-SBP	300.00	3.6	Spirally wound	1.006
SCW-1C-0450K-SBP	450.00	3.6	Spirally wound	1.006
SCW-1C-0600K-SBP	600.00	3.6	Spirally wound	1.006
SCW-1C-1500K-SBP	1500.00	3.6	Spirally wound	1.002

Connection SPK (for installation of cold lead cable)

A	SPK body
B	Terminal Block
C	Cover gasket
D	SUS bolts
E	Cold lead packing cover
F	Packing(cold lead)
G	Packing(heating cable)
H	Heating cable packing cover
I, J	Body cover & bolt

Splice Kit(SPK-100)

Series Resistance Heating Cables

SCWL Heating Cable Construction

1-2. Single Core (1 conductor)

Type	Structure of Core	Rated Voltage	Section mm	Resistance @20°C Ω/km
SCWL-1C-3.0	19*0.45	600V 50~60HZ	3	5.83
SCWL-1C-4.0	19*0.52		4	4.37
SCWL-1C-5.0	19*0.58		5	3.52
SCWL-1C-6.0	19*0.64		6	2.93
SCWL-1C-7.0	19*0.69		7	2.51
SCWL-1C-8.0	19*0.74		8	2.20
SCWL-1C-9.0	19*0.78		9	1.95
SCWL-1C-10.0	19*0.82		10	1.75

* Special order should be placed from the conductor size of 12mm(1.31 Ω/km) to 70mm(0.258 Ω/km).

1-3. Double Core (2 conductor)

Type	Structure of Core	Rated Voltage	Section mm	Resistance @20°C (single core) Ω/km	Resistance @20°C (the cable) Ω/km
SCWL-2C-3.0	19*0.45	600V 50~60HZ	3	5.83	11.66
SCWL-2C-4.0	19*0.52		4	4.37	8.74
SCWL-2C-5.0	19*0.58		5	3.52	7.04
SCWL-2C-6.0	19*0.64		6	2.93	5.86
SCWL-2C-7.0	19*0.69		7	2.51	5.02
SCWL-2C-8.0	19*0.74		8	2.20	4.40
SCWL-2C-9.0	19*0.78		9	1.95	3.90
SCWL-2C-10.0	19*0.82		10	1.75	3.50

1-4. Triple Core (3 conductor)

Type	Structure of Core	Rated Voltage	Section mm	Resistance @20°C (the cable) Ω/km	Resistance @20°C (the cable) Ω/km
SCWL-3C-3.0	19*0.45	600V 50~60HZ	3	0.00583	5.83
SCWL-3C-4.0	19*0.52		4	0.00437	4.37
SCWL-3C-5.0	19*0.58		5	0.00352	3.52
SCWL-3C-6.0	19*0.64		6	0.00293	2.93
SCWL-3C-7.0	19*0.69		7	0.00251	2.51
SCWL-3C-8.0	19*0.74		8	0.00220	2.20
SCWL-3C-9.0	19*0.78		9	0.00195	1.95
SCWL-3C-10.0	19*0.82		10	0.00175	1.75

Series Resistance Heating Cables

SCW Heating Cable Construction

- ➔ Resistance (M.Ω/KM) ≥ 750
- ➔ Max. Exposure Temp' 205°C(Fluoropolymer), 250°C(PFA), 105°C(PVC), 200°C(Silicone)
- ➔ Min. Installation Temp' -50°C(Fluoropolymer), -20°C(PVC, Silicone)
- ➔ Min. bend radius :
 - @-15°F/-5°C ----- 22mm
 - @-76°F/-60°C ----- 32mm
- ➔ Protection grade : IP56
- ➔ Voltage test : 2500VAC/50HZ/1min

2. Application

This type of heating cable is mainly used in the heat preservation for long pipe, the max. length of one circuit can be 5km by one power supplier.

3. Connection Method of Cold-Lead

In order to improve the longevity of the heating cable, remove the insulation layer of power box, splice-kit and terminal end kit, pressure and connect the copper connector and cold-lead of the cable, then wrap with 3M high temperature tape.

Section mm	Rated current load	Section of heating cable(mm)
5.0	40A	SCW-1C
10.0	60A	SCWL-1C,2C,3C * 3.0, 4.0, 5.0
16.0	100A	SCWL-1C,2C,3C * 6.0, 7.0, 8.0
25.0	150A	SCWL-1C,2C,3C * 9.0, 10.0

