

COMFORT HEATING CABLES AND MATS



www.tempsens.com



About the Company

MARATHON HEATER (INDIA) PVT. LTD is a part of Tempsens group which was established at Udaipur, India. Today Tempsens is one of the largest manufacturer of temperature sensors & heaters with world class manufacturing facilities in India, Germany and Indonesia.

Tempsens is an ISO 9001:2008 certified company with NABL Accredited Laboratory.

The company is involved into manufacturing of Thermocouples, RTDs, Thermowells, cables, Non-Contact Pyrometers, Heaters and Calibration Equipment etc. with Covered Area of 300000 Sq. Ft.

MARATHON HEATER (INDIA) PVT. LTD Equipped with modern infrastructure, innovative technologies and a dedicated team of qualified Engineers, we have evolved over the past years to become one of the most trustworthy manufacturers of Industrial heating solutions. Marathon continues its constant endeavor of delivering solutions for critical & challenging process requirements. We are constantly looking for ways to improve not only our products but also maintain order processing, design process and product literature. Quality and customer satisfaction were and will be our prime motto.

We design, develop and manufacture Electric Heating Cables, Heating Mats, Electric Heaters (Electric heat exchanger) for various processes in the Domestic, Oil & Gas Industry, Refinery, petrochemicals, power, chemical, Marine and various other industrial & process applications.

Our well experience Technical team also provides extensive support to privileged customers with Electric heating cable, heating mats and heaters required for Research n developments.

Marathon Heaters also manufacturer of Metallic Elements, high temperature furnaces, Industrial ovens, Temperature sensors as per customers required & international specifications.

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ISO 14001-2015 Certified

ISO 45001-2018 Certified



FLOOR HEATING CABLES

Nothing matches to radiant floor heating. It is more comfortable than any other type of heating system. Radiant floor heating is the most energy-efficient way of delivering heat. There is no other floor heating option that compares in terms of comfort. Radiant floor heating is a low-temperature technology that may be regulated individually in each area. Because it warms the people and item directly rather than heating air.

In most circumstances, radiant floor heating cables may save 20 to 40% of energy compared to other forms of heating system. With digital electronic thermostat, these are completely customizable for maximum comfort and efficiency. The thermostat is regulated to provide optimal economic functioning of the floor heating cable, not the W/m of the heating cable, which determines energy usage.

The following are some of the benefits of heating cables:

Free of Ageing : The conductor element is protected from thermal ageing by various high grade insulation. Once installed, the floor heating cable has a life span equal to that of the building.

Maintenance Free : Electrical floor heating cables require minimal maintenance since they do not have any moving parts, unlike hydronic cables, which include valves and other components that require periodic maintenance, tubes in a hydronic system can also get clogged as a result of pollution and must be replaced on a regular basis.

Very thin : The diameter of the cable is less than that of cables with different insulations, such as PVC. It simplifies the laying process. The rise in floor level during installation is minimized as a result of this aspect.

Moisture Resistant : Shielded & insulated floor heating cables are specifically developed for use in areas where moisture is a problem too, such as bathrooms.

Advantages of Marathon Heating Cables

- Easy installation and can be installed in any area in the house and any type of flooring.
- Can be an excellent option for low-energy homes.
- Works quietly from beneath the tiles/plywood.
- Underfloor heating distributes heat where it is needed, resulting in maximum heat efficiency and only very little heat loss.
- Easy to control required temperature in all weather by digital temperature controller with thermostat.
- For optimal protection, Marathon floor heating cables are insulated using XPLE/ETFE/FEP/PTFE on both the conductors and PVC (HR-FR) on the outer jacket.

- Marathon floor heating cables have been developed particularly to deliver primary heating beneath a variety of flooring. To facilitate 'tape-down' installation, the cables are also available into the preassembled fiber glass mats.
- Marathon floor heating cables are completely grounded and comes with a 3.5 meter long cold lead wire for power connection.

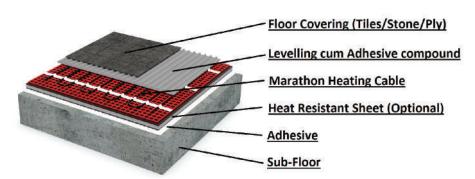
Floor Heating Cables

Features

Shielding Coverage	100% Coverage	
Bending Radius	5 times of cable thickness	
Jacketing	Heat Resistant and Flame Retardant Jacketing	
Flexibility of Cable	Excellent Flexibility for easy installation	
Long Cold Lead	3.5 meter cold tail (Can be customized as per requirement)	
Comfort	Higher degrees of comfort can be achieved by using heating cables with close and consistent spacing, as well as thermostat to determine temperature needs.	
Range	Standard heat loads are available in 100 watt to 3300 watt. As part of the offered product range, several sizes for various types / sizes of flooring are also available.	
Custom-Built	In addition to this broad range, cables can be customized to meet specific length requirements, as well as heat loads and voltage needs.	

Application

- Remove any trash and sharp protrusions from the subfloor.
- Prior to installation, consider deflection and structural factors.
- Before installing the cable, check its applicability according to the instructions.
- Prior to putting floor coverings, consider using a scratch coat or a thin leveler.
- Install Heat Resistant Insulation Sheet if want to reduce heat loss (Optional).
- Install Marathon Floor Heating Cable on Plastic Molded Spacer or Aluminium Mounting Tape or similar spacer according to the manufacturer's installation directions.
- Set up a digital temperature controller with thermostat for sensing the floor.
- Install the floor covering according to the manufacturer's directions.



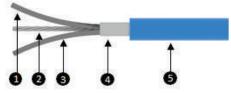
Maintenance & Warranty

Marathon floor heating cable requires no maintenance for the remainder of its warrantied life when installed according to the installation instructions and adequate testing has been completed throughout.

Marathon warranty protects the Marathon heating cable for a period of 30 years against manufacturer's faults.



FLOOR HEATING CABLE (FHC-SX-06)



- 1 XLPE Insulated Heating Element
- 2 Multi-strand Earth Wire
- 3 XLPE Insulated Return Wire
- 4 Al Foil for 100% Shielding
- 5 PVC (HR-FR) Insulated Outer Jacket

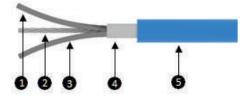
Construction

Element	0.076mm2 /0.30mm2 CuNi/SS-
Conductor size	Single Core
Insulation	XLPE
Shielding	Aluminium Foil For 100% Coverage
Earth Wire	Multi-strand
Jacket	PVC (HR-FR)
Power Output per Meter	06 Watt / Meter
Standard Voltage	230 Volt AC

Range

Model	Watts	Cable Length (Meter)
FHC-SX-06-180	180	30
FHC-SX-06-300	300	50
FHC-SX-06-360	360	60
FHC-SX-06-480	480	80
FHC-SX-06-600	600	100
FHC-SX-06-720	720	120
FHC-SX-06-900	900	150
FHC-SX-06- 1140	1140	190

FLOOR HEATING CABLE (FHC-SX-10)



- 1 XLPE Insulated Heating Element
- 2 Solid Earth Wire
- 3 XLPE Insulated Return Wire
- 4 Al Foil for 100% Shielding
- 5 PVC (HR-FR) Insulated Outer Jacket

Construction

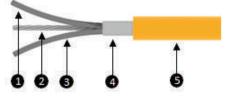
Element Conductor size	0.028mm2 /0.40mm2 CuNi/SS- Single Core	
Insulation	XLPE	
Shielding	Aluminium Foil For 100% Coverage	
Earth Wire	TPC 1.0mm (Solid)	
Jacket	PVC (HR-FR)	
Power Output per Meter	10 Watt / Meter	
Standard Voltage	230 Volt AC	

Range

Model	Watts	Cable Length (Meter)
FHC-SX-10-100	100	10.0
FHC-SX-10-200	200	20.0
FHC-SX-10-300	300	30.0
FHC-SX-10-400	400	40.0
FHC-SX-10-500	500	50.0
FHC-SX-10-600	600	60.0
FHC-SX-10-800	800	80.0
FHC-SX-10-1000	1000	100.0
FHC-SX-10-1200	1200	120.0
FHC-SX-10-1500	1500	150.0
FHC-SX-10-1900	1900	190.0



FLOOR HEATING CABLE (FHC-SP-12.5)



- 1 PTFE Insulated Heating Element
- 2 Solid Earth Wire
- 3 PTFE Insulated Return Wire
- 4 Al Foil for 100% Shielding
- 5 PVC (HR-FR) Insulated Outer Jacket

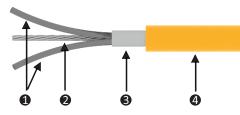
Construction

Element Conductor size	0.013mm2 /0.36mm2 CuNi/SS/Kanthal/Cu- Single Core	
Insulation	PTFE	
Shielding	Aluminium Foil For 100% Coverage	
Earth Wire	TPC 1.0mm - 1.20mm (Solid)	
Jacket	PVC (HR-FR)	
Power Output per Meter	12.5 Watt / Meter	
Standard Voltage	230 Volt AC	

Range

Model	Watts	Cable Length (Meter)
FHC-SP-12.5-85	85	6.76
FHC-SP-12.5-150	150	12.50
FHC-SP-12.5-225	225	17.66
FHC-SP-12.5-300	300	23.77
FHC-SP-12.5-375	375	29.87
FHC-SP-12.5-450	450	35.97
FHC-SP-12.5-525	525	41.56
FHC-SP-12.5-600	600	47.67
FHC-SP-12.5-675	675	53.77
FHC-SP-12.5-750	750	59.87
FHC-SP-12.5-900	900	71.57
FHC-SP-12.5-1050	1050	83.77
FHC-SP-12.5-1200	1200	95.47
FHC-SP-12.5-1350	1350	107.67
FHC-SP-12.5-1700	1700	136
FHC-SP-12.5-2050	2050	164
FHC-SP-12.5-2400	2400	192
FHC-SP-12.5-2700	2700	216
FHC-SP-12.5-3050	3050	244

FLOOR HEATING CABLE (FHC-DF-15.7)



- 1 FEP Insulated Dual Heating Element
- 2 Multi-strand Earth Wire
- 3 Al Foil for 100% Shielding
- 4 PVC (HR-FR) Insulated Outer Jacket

Construction

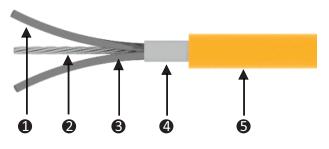
Element Conductor size	0.050mm2 /0.13mm2 CuNi- Two Core	
Insulation	FEP	
Shielding	Aluminium Foil For 100% Coverage	
Earth Wire	TPC 0.50mm ² (Multi-strand)	
Jacket	PVC (HR-FR)	
Power Output per Meter	15.7 Watt / Meter	
Standard Voltage	230 Volt AC	

Range

Model	Watts	Cable Length (Meter)
FHC-DF-15.7-150	150	9.55
FHC-DF-15.7-187.5	187.5	11.94
FHC-DF-15.7-225	225	14.33
FHC-DF-15.7-262.5	262.5	16.72
FHC-DF-15.7-300	300	19.11
FHC-DF-15.7-337.5	337.4	21.50
FHC-DF-15.7-375	375	23.89
FHC-DF-15.7-450	450	28.66
FHC-DF-15.7-525	525	33.44
FHC-DF-15.7-600	600	38.22
FHC-DF-15.7-675	675	42.99
FHC-DF-15.7-750	750	47.77
FHC-DF-15.7-900	900	57.32
FHC-DF-15.7-1050	1050	66.88
FHC-DF-15.7-1200	1200	76.43
FHC-DF-15.7-1350	1350	85.99
FHC-DF-15.7-1500	1500	95.54
FHC-DF-15.7-1650	1650	105.10
FHC-DF-15.7-1800	1800	114.65
FHC-DF-15.7-1950	1950	124.20
FHC-DF-15.7-2250	2250	143.31



FLOOR HEATING CABLE (FHC-SP-15.7)



- 1 PTFE Insulated Heating Element
- 2 Multi-strand Earth Wire
- 3 PTFE Insulated Return Wire
- 4 Al Foil for 100% Shielding
- 5 PVC (HR-FR) Insulated Outer Jacket

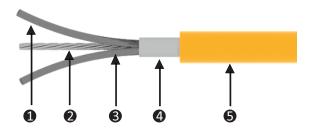
Construction

Element Conductor size	0.013mm2 /0.36mm2 CuNi/SS/Kanthal/Cu- Single Core
Insulation	PTFE
Shielding	Aluminium Foil For 100% Coverage
Earth Wire	TPC 1.0mm- 1.25mm (Multi-strand)
Jacket	PVC(HR-FR)
Power Output per Meter	15.7 Watt / Meter
Standard Voltage	230 Volt AC

Range

Model	Watts	Cable Length (Meter)
FHC-SP-15.7-113	113	7.50
FHC-SP-15.7-150	150	10.00
FHC-SP-15.7-188	188	12.50
FHC-SP-15.7-225	225	15.00
FHC-SP-15.7-263	263	17.50
FHC-SP-15.7-300	300	20.00
FHC-SP-15.7-338	338	22.50
FHC-SP-15.7-375	375	25.00
FHC-SP-15.7-450	450	30.00
FHC-SP-15.7-525	525	35.00
FHC-SP-15.7-600	600	40.00
FHC-SP-15.7-675	675	45.00
FHC-SP-15.7-750	750	50.00
FHC-SP-15.7-900	900	60.00
FHC-SP-15.7-1050	1050	70.00
FHC-SP-15.7-1200	1200	80.00
FHC-SP-15.7-1350	1350	90.00
FHC-SP-15.7-1500	1500	100.00

FLOOR HEATING CABLE (FHC-SX-17)



- 1 XLPE Insulated Heating Element
- 2 Solid Earth Wire
- 3 XLPE Insulated Return Wire
- 4 Al Foil for 100% Shielding
- 5 PVC (HR-FR) Insulated Outer Jacket

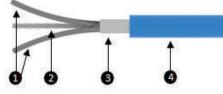
Construction

Element Conductor size	0.11mm2 /0.34mm2 CuNi/SS- Single Core	
Insulation	XLPE	
Shielding	Aluminium Foil For 100% Coverage	
Earth Wire	TPC 0.75mm ² (Solid)	
Jacket	PVC (HR-FR)	
Power Output per Meter	17 Watt / Meter	
Standard Voltage	230 Volt AC	

Range

Model	Watts	Cable Length (Meter)
FHC-SX-17-150	150	8.8
FHC-SX-17-300	300	17.6
FHC-SX-17-400	400	23.5
FHC-SX-17-500	500	29.4
FHC-SX-17-600	600	35.3
FHC-SX-17-700	700	41.2
FHC-SX-17-850	850	50
FHC-SX-17-1000	1000	58.8
FHC-SX-17-1250	1250	73.5
FHC-SX-17-1500	1500	88.2
FHC-SX-17-1700	1700	100
FHC-SX-17-2100	2100	123.5
FHC-SX-17-2600	2600	152.9
FHC-SX-17-2900	2900	170.6
FHC-SX-17-3300	3300	194.1

FLOOR HEATING CABLE (FHC-DE-120V-03)



- 1 ETFE Insulated Dual Heating Element
- 2 Multi-strand Earth Wire
- 3 Al Foil for 100% Shielding
- 4 PVC (HR-FR) Insulated Outer Jacket

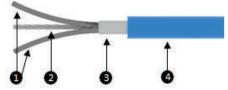
Construction

Element Conductor size	0.07mm2 /0.35mm2 CuNi - Two Core
Insulation	ETFE
Shielding	Aluminium Foil For 100% Coverage
Earth Wire	TPC 1.00mm ² (Multi-strand)
Jacket	PVC (HR-FR)
Power Output per Foot	03 Watt / Foot
Standard Voltage	120 Volt AC

Range

Model	Watts	Cable Length (Foot)
FHC-DE-120V-03-120	120	40
FHC-DE-120V-03-180	180	60
FHC-DE-120V-03-240	240	80
FHC-DE-120V-03-300	300	100
FHC-DE-120V-03-360	360	120
FHC-DE-120V-03-420	420	140
FHC-DE-120V-03-480	480	160
FHC-DE-120V-03-540	540	180
FHC-DE-120V-03-600	600	200
FHC-DE-120V-03-720	720	240
FHC-DE-120V-03-840	840	280
FHC-DE-120V-03-960	960	320
FHC-DE-120V-03-1080	1080	360
FHC-DE-120V-03-1200	1200	400

FLOOR HEATING CABLE (FHC-DE-240V-03)



- 1 ETFE Insulated Dual Heating Element
- 2 Multi-strand Earth Wire
- 3 Al Foil for 100% Shielding
- 4 PVC (HR-FR) Insulated Outer Jacket

Construction

Element Conductor size	0.125mm2 /0.54mm2 CuNi/Cu/SS/kanthal- Two Core Solid	
Insulation	ETFE	
Shielding	Aluminium Foil For 100% Coverage	
Earth Wire	TPC 1.0mm ² (Multi-strand)	
Jacket	PVC (HR-FR)	
Power Output per Foot	03 Watt / Foot	
Standard Voltage	240 Volt AC	

Model	Watts	Cable Length (Foot)
FHC-DE-240V-03-120	120	40
FHC-DE-240V-03-180	180	60
FHC-DE-240V-03-240	240	80
FHC-DE-240V-03-300	300	100
FHC-DE-240V-03-360	360	120
FHC-DE-240V-03-420	420	140
FHC-DE-240V-03-480	480	160
FHC-DE-240V-03-540	540	180
FHC-DE-240V-03-600	600	200
FHC-DE-240V-03-660	660	220
FHC-DE-240V-03-720	720	240
FHC-DE-240V-03-840	840	280
FHC-DE-240V-03-960	960	320
FHC-DE-240V-03-1080	1080	360
FHC-DE-240V-03-1200	1200	400
FHC-DE-240V-03-1320	1320	440
FHC-DE-240V-03-1440	1440	480
FHC-DE-240V-03-1680	1680	560
FHC-DE-240V-03-1920	1920	640
FHC-DE-240V-03-2160	2160	720
FHC-DE-240V-03-2400	2400	800



FLOOR HEATING MATS

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In most circumstances, radiant floor heating mats may save 20 to 40% of energy compared to other forms of heating system. With digital electronic thermostat, these are completely customizable for maximum comfort and efficiency. The thermostat is regulated to provide optimal economic functioning of the floor heating mat, not the W/m of the heating cable, which determines energy usage.

The following are some of the benefits of floor heating mats:

Free of Ageing : The conductor element is protected from thermal ageing by various high grade insulation. Once installed, the floor heating mat has a life span equal to that of the building.

Maintenance Free : Electrical floor heating mats require minimal maintenance since they do not have any moving parts, unlike hydronic mats, which include valves and other components that require periodic maintenance, tubes in a hydronic system can also get clogged as a result of pollution and must be replaced on a regular basis.

Very thin : The diameter of the cable is less than that of mats with different insulations, such as PVC. It simplifies the laying process. The rise in floor level during installation is minimized as a result of this aspect.

Moisture Resistant : Shielded & insulated floor heating mats are specifically developed for use in areas where moisture is a problem too, such as bathrooms.

Advantages of Marathon Heating Mats

- Easy installation and can be installed in any area in the house and any type of flooring.
- Can be an excellent option for low-energy homes.
- Works quietly from beneath the tiles/plywood.
- Underfloor heating distributes heat where it is needed, resulting in maximum heat efficiency and only very little heat loss.
- Easy to control required temperature in all weather by digital temperature controller with thermostat.
- For optimal protection, Marathon floor heating mats are insulated using XPLE/ETFE/FEP/PTFE on both the conductors and PVC (HR-FR) on the outer jacket.
- Marathon floor heating mats have been developed particularly to deliver primary heating beneath a variety of flooring. To facilitate 'tape-down' installation, the mats are also available into the preassembled fiber glass mats.
- Marathon floor heating mats are completely grounded and comes with a 3.5 meter long cold lead wire for power connection.

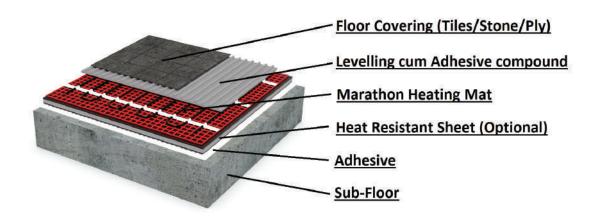
FLOOR HEATING MATS

Features

Shielding Coverage	100% Coverage
Bending Radius	5 times of cable thickness
Jacketing	Heat Resistant and Flame Retardant Jacketing
Flexibility of Cable	Excellent Flexibility for easy installation
Long Cold Lead	3.5 meter cold tail (Can be customized as per requirement)
Comfort	Higher degrees of comfort can be achieved by using heating mats with close and consistent spacing, as well as thermostat to determine temperature needs.
Range	Standard heat loads are available in 100 watt to 3300 watt. As part of the offered product range, several sizes for various types / sizes of flooring are also available.
Custom-Built	In addition to this broad range, mats can be customized to meet specific length requirements, as well as heat loads and voltage needs.

Application

- Remove any trash and sharp protrusions from the subfloor.
- Prior to installation, consider deflection and structural factors.
- Before installing the floor heating mat, check its applicability according to the instructions.
- Prior to putting floor coverings, consider using a scratch coat or a thin leveler.
- Install Heat Resistant Insulation Sheet if want to reduce heat loss (Optional).
- Install Marathon Floor Heating Mat according to the manufacturer's installation directions.
- Set up a digital temperature controller with thermostat for sensing the floor.
- Install the floor covering according to the manufacturer's directions.



Maintenance & Warranty

Marathon floor heating mat requires no maintenance for the remainder of its warrantied life when installed according to the installation instructions and adequate testing has been completed throughout.

 $Marathon\,warranty\,protects\,the\,Marathon\,floor\,heating\,mat\,for\,a\,period\,of\,30\,years\,against\,manufacturer's\,faults.$



FLOOR HEATING MAT (FHM-SX-100)



Heating Cable of 10 w/m XLPE Insulation on heating core AI Foil Shield With Solid Earth Wire Sticky FG Mesh/Non-Sticky FG Mesh/Cross Filament Tape Double sided tissue tape / PP tape PVC Outer Jacket (Heat Resistance) Separate Cold Tail of 3.5 meter.

Construction

Heating Cable	10 watt / meter
Spacing	Sticky FG Mesh/ Non-Sticky FG Mesh/ Cross Filament Tape
Core Insulation	XLPE
Shielding	Aluminium Foil For 100% Coverage
Earth Wire	TPC 1.0mm (Solid)
Jacket	PVC (HR FR)
Power Output per Meter ²	100 Watt / Meter ²
Standard Voltage	230 Volt AC

Range

Model	Watts	Mat Area (Meter ²)
FHM-SX-100-100	100	1.0
FHM-SX-100-200	200	2.0
FHM-SX-100-300	300	3.0
FHM-SX-100-400	400	4.0
FHM-SX-100-500	500	5.0
FHM-SX-100-600	600	6.0
FHM-SX-100-800	800	8.0
FHM-SX-100-1000	1000	10.0
FHM-SX-100-1200	1200	12.0
FHM-SX-100-1500	1500	15.0
FHM-SX-100-1900	1900	19.0

FLOOR HEATING MAT (FHM-DF-150)



Heating Cable of 15.7 w/m FEP Insulation on heating core Al Foil Shield with Multi-strand Earth Wire Sticky FG Mesh/Non-Sticky FG Mesh/Cross Filament Tape Double sided tissue tape / PP tape PVC Outer Jacket (Heat Resistance) Separate Cold Tail of 3.5 meter.

Construction

Heating Cable	15.7 watt / meter	
	Sticky FG Mesh/ Non-Sticky	
Spacing	FG Mesh/ Cross Filament	
	Таре	
Core Insulation	FEP	
Shielding	Aluminium Foil For 100%	
	Coverage	
Earth Wire	Multi-strand 0.5mm ²	
Jacket	PVC (HR FR)	
Power Output	150 Watt / Meter ²	
per Meter ²		
Standard		
Voltage	230 Volt AC	

Range

Model	Watts	Mat Area (Meter²)
FHM-DF-150-150	150	1.00
FHM-DF-150-187.5	187.5	1.25
FHM-DF-150-225	225	1.50
FHM-DF-150-262.5	262.5	1.75
FHM-DF-150-300	300	2.00
FHM-DF-150-337.5	337.5	2.25
FHM-DF-150-375	375	2.50
FHM-DF-150-450	450	3.00
FHM-DF-150-525	525	3.50
FHM-DF-150-600	600	4.00
FHM-DF-150-675	675	4.50
FHM-DF-150-750	750	5.00
FHM-DF-150-900	900	6.00
FHM-DF-150-1050	1050	7.00
FHM-DF-150-1200	1200	8.00
FHM-DF-150-1350	1350	9.00
FHM-DF-150-1500	1500	10.00
FHM-DF-150-1650	1650	11.00
FHM-DF-150-1800	1800	12.00
FHM-DF-150-1950	1950	13.00
FHM-DF-150-2250	2250	15.00

TEMPSENS Thermal & Cable Solutions

FLOOR HEATING M^{AT} (FHM-SX-200)



Heating Cable of 17 w/m XLPE Insulation on heating core Al Foil Shield With Solid Earth Wire Sticky FG Mesh/Non-Sticky FG Mesh/Cross Filament Tape Double sided tissue tape / PP tape PVC Outer Jacket (Heat Resistance) Separate Cold Tail of 3.5 meter.

Construction

Heating Cable	17.0 watt / meter	
Spacing	Sticky FG Mesh/ Non-Sticky FG Mesh/ Cross Filament Tape	
Core Insulation	XLPE	
Shielding	Aluminium Foil For 100% Coverage	
Earth Wire	TPC 1.0mm (Solid)	
Jacket	PVC (HR FR)	
Power Output per Meter ²	200 Watt / Meter ²	
Standard Voltage	230 Volt AC	

Range

Model	Watts	Mat Area (m ²)
FHM-SX-200-200	200	1.00
FHM-SX-200-300	300	1.50
FHM-SX-200-400	400	2.00
FHM-SX-200-500	500	2.50
FHM-SX-200-600	600	3.00
FHM-SX-200-700	700	3.50
FHM-SX-200-850	850	4.25
FHM-SX-200-1000	1000	5.00
FHM-SX-200-1250	1250	6.25
FHM-SX-200-1500	1500	7.50
FHM-SX-200-1700	1700	8.50
FHM-SX-200-2100	2100	10.50
FHM-SX-200-2600	2600	13.00
FHM-SX-200-2900	2900	14.50
FHM-SX-200-3300	3300	16.50

FLOOR HEATING MAT (FHM-DE-240V-12)



Heating Cable of 3 w/f XLPE Insulation on heating core Al Foil Shield with Multi-strand Earth Wire Sticky FG Mesh/Non-Sticky FG Mesh/Cross Filament Tape Double sided tissue tape / PP tape PVC Outer Jacket (Heat Resistance) Separate Cold Tail of 3.5 meter.

Construction

Heating Cable	3.0 watt / foot	
Spacing	Sticky FG Mesh/ Non-Sticky FG Mesh/ Cross Filament Tape	
Core Insulation	ETFE	
Shielding	Aluminium Foil For 100% Coverage	
Earth Wire	Multi-strand	
Jacket	PVC (HR FR)	
Power Output per Feet ²	12 Watt / Feet ²	
Standard Voltage	240 Volt AC	

Model	Watts	Mat Area (Feet ²)
FHM-DE-240V-12-120	120	10
FHM-DE-240V-12-180	180	15
FHM-DE-240V-12-240	240	20
FHM-DE-240V-12-300	300	25
FHM-DE-240V-12-360	360	30
FHM-DE-240V-12-420	420	35
FHM-DE-240V-12-480	480	40
FHM-DE-240V-12-540	540	45
FHM-DE-240V-12-600	600	50
FHM-DE-240V-12-660	660	55
FHM-DE-240V-12-720	720	60
FHM-DE-240V-12-840	840	70
FHM-DE-240V-12-960	960	80
FHM-DE-240V-12-1080	1080	90
FHM-DE-240V-12-1200	1200	100
FHM-DE-240V-12-1320	1320	110
FHM-DE-240V-12-1440	1440	120
FHM-DE-240V-12-1680	1680	140
FHM-DE-240V-12-1920	1920	160
FHM-DE-240V-12-2160	2160	180
FHM-DE-240V-12-2400	2400	200



ROOF & GUTTER SNOW MELTING CABLES

Marathon Roof & Gutter Snow Melting Cables provides the most effective approach to heat a Roof & Gutter uniformly to de-icing the snow. Direct heating will give a faster reaction time and more temperature control options. Any snow on the Roof & Gutter will de-ice rapidly with safety. Roof & Gutter Snow Melting Cables are hygienic, safe and economical. These are heavy duty, low heat out put cables, mostly used for any kind of roof and gutters to keep them in load free condition in all seasons. This cable is ideal for ice and snow melting applications such as roof of apartment & automobile parking as well as these can be used in driveways, pavement, outdoor steps, ramps, and drainage areas.

Features

Shielding Coverage	100% Coverage
Bending Radius	5 times of cable thickness
Jacketing	Heat Resistant and Flame Retardant Jacketing
Flexibility of Cable	Excellent Flexibility for easy installation
Long Cold Lead	5 meter cold tail (Can be customized as per requirement)
Comfort	Higher degrees of comfort can be achieved by using heating cables with close and consistent spacing, as well as temperature controller to determine temperature needs.
Range	Standard heat loads are available in 300 watt to 4500 watt. As part of the offered product range, several sizes for various types / sizes of flooring are also available.
Custom-Built	In addition to this broad range, cables can be customized to meet specific length requirements, as well as heat loads and voltage needs.

Application

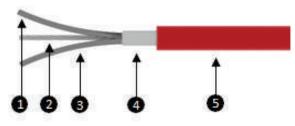
- Easy installation and can be installed in any area of the roof.
- Can be an excellent option for low-energy homes.
- It distributes heat where it is needed, resulting in maximum heat efficiency and only very little heat loss.
- Easy to control required temperature in all weather by digital temperature controller with thermostat.
- For optimal protection, these cables are insulated using XPLE on both the conductors and PVC (HR-FR) on the outer jacket.
- It aids the consumers in cold regions, when temperatures drop below zero degrees, in reducing roof damage and preventing icicles and frozen facades.
- Marathon Roof & Gutter Snow Melting Cables comes with a 5 meter long cold lead wire for power connection.

Maintenance & Warranty

Marathon heating cable requires no maintenance for the remainder of its warrantied life when installed according to the installation instructions and adequate testing has been completed throughout.

Marathon warranty protects the Marathon heating cable for a period of 20 years against manufacturer's faults.

ROOF & GUTTER SNOW MELTING CABLE (RGSMC-SX-30)



- 1 XLPE Insulated Heating Element
- 2 Solid Earth Wire
- 3 XLPE Insulated Return Wire
- 4 Al Foil for 100% Shielding
- 5 PVC (HR-FR) Insulated Outer Jacket

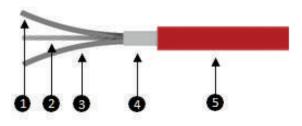
Construction

Element Conductor size	0.11mm2 /0.39mm2 CuNi/SS- Single Core	
Insulation	XLPE	
Shielding	Aluminium Foil For 100% Coverage	
Earth Wire	TPC 0.75mm ² (Solid)	
Jacket	PVC (HR-FR)	
Power Output per Meter	30 Watt / Meter	
Standard Voltage	230 Volt AC	

Range

Model	Watts	Cable Length (Meter)
RGSMC-SX-30-300	300	10
RGSMC-SX-30-450	450	15
RGSMC-SX-30-600	600	20
RGSMC-SX-30-750	750	25
RGSMC-SX-30-900	900	30
RGSMC-SX-30-1200	1200	40
RGSMC-SX-30-1500	1500	50
RGSMC-SX-30-1800	1800	60
RGSMC-SX-30-2100	2100	70
RGSMC-SX-30-2400	2400	80
RGSMC-SX-30-3000	3000	100
RGSMC-SX-30-3400	3400	113.3
RGSMC-SX-30-3600	3600	120
RGSMC-SX-30-4200	4200	140

ROOF & GUTTER SNOW MELTING CABLE (RGSMC-SX-45)



- 1 XLPE Insulated Heating Element
- 2 Solid Earth Wire
- 3 XLPE Insulated Return Wire
- 4 Al Foil for 100% Shielding
- 5 PVC (HR-FR) Insulated Outer Jacket

Construction

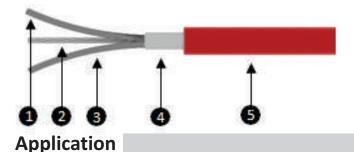
Element	0.11mm2 /0.39mm2 CuNi/SS-	
Conductor size	Single Core	
Insulation	XLPE	
Shielding	Aluminium Foil For 100%	
Shielding	Coverage	
Earth Wire	TPC 0.75mm ² (Solid)	
Jacket	PVC (HR-FR)	
Power Output per Meter	45 Watt / Meter	
Standard Voltage	230 Volt AC	

Model	Watts	Cable Length (Meter)
RGSMC-SX-45-450	450	10.0
RGSMC-SX-45-675	675	15.0
RGSMC-SX-45-900	900	20
RGSMC-SX-45-1350	1350	30.0
RGSMC-SX-45-1800	1800	40.0
RGSMC-SX-45-2250	2250	50.0
RGSMC-SX-45-3150	3150	70.0
RGSMC-SX-45-3600	3600	80.0
RGSMC-SX-45-4500	4500	100.0



MARATHON FROST FREE HEATING CABLES

FROST FREE HEATING CABLE (FFHC-SY-10)



- 1 PVC Insulated Heating Element
- 2 TPC Braided Earth Wire
- 3 PVC Insulated Return Wire
- 4 Al Foil for 100% Shielding
- 5 PVC (HR-FR) Insulated Outer Jacket

Marathon Frost Free Heating Cable are used in colder climates to keep water flowing by preventing it from freezing in pipe lines. It can also heat the water passing through your clients' pipes. It is often used in mountainous areas and places where the temperature goes below freezing. It's commonly found in metallic and plastic water pipelines, sanitary pipes, and water containers, among other things. The key USP of Marathon Heater's Freeze Protection is built-in thermostatic control. If in severe cold, this specifically engineered cable maintains a constant flow of water

Construction

Element Conductor size	0.076mm2 /0.30mm2 CuNi44/SS/Kanthal- Single Core
Insulation	PVC
Shielding	Aluminium Foil with TPC Braided 100% Coverage
Jacket	PVC (HR-FR)
Thermostat	On @ 5°C & Off @ 10°C
Power Output per Meter	10 Watt / Meter
Standard Voltage	230 Volt AC

Model	Watts	Cable Length (foot)
FFHC-SY-10-10	10	1
FFHC-SY-10-20	20	2
FFHC-SY-10-40	40	4
FFHC-SY-10-60	60	6
FFHC-SY-10-80	80	8
FFHC-SY-10-100	100	10
FFHC-SY-10-150	150	15
FFHC-SY-10-200	200	20
FFHC-SY-10-230	230	23
FFHC-SY-10-260	260	26
FFHC-SY-10-300	300	30
FFHC-SY-10-350	350	35
FFHC-SY-10-400	400	40
FFHC-SY-10-450	450	45
FFHC-SY-10-500	500	50



ENGINEERED SOLUTIONS FOR HEATING & SENSING



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