



# Civil and Commercial **Electrical Tracer Product Brochure**







No. 86 Guandoumen Road, Jiujiang **Economic Development Zone** 



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# **Company Profile**

Wuhu Jiahong New Material Co., Ltd. was established in 2002 with a registered capital of RMB 37.8775 million. Jiahong Intelligent Factory is located on Guandoumen Road, Jiujiang District, covering an area of 69.2 mu (approximately 4.61 hectares). It is a high-tech enterprise integrating design and development, production and sales, and engineering services. Since its establishment, the company has always been focusing on R&D, production, sales, technical application and engineering services of electrical tracing products, covering three types of heating cables, i.e., self regulating, constant wattage and skin effect, as well as supporting heat tracing accessories. The company has obtained the qualification of professional contracting of building electromechanical installation engineering, which can completely achieve the one-stop "turnkey" engineering service for customers. Since the establishment of the engineering service center, the company has more than 10 years of experience in electrical heat tracing projects. As a professional manufacturer of electrical heat tracing and a system solution provider, and relying on the mature polymer material design and preparation technology, Jiahong New Material has developed electrical tracing products with excellent performance and stable quality for domestic and foreign customers, which can be widely used in industrial fields such as oil and gas, chemical industry, power energy, marine vessels, biological medicine, etc., as well as civil and commercial fields such as thermal insulation, anti-freezing, snow melting, and heating.

After years of technological accumulation and independent innovation, the company has achieved breakthroughs in key areas such as new material design and development, product manufacturing and testing processes, and application scenario design. As a result, it has received several prestigious accolades in technological innovation, including being recognized as a "Specialized, Refined, Unique, and New Little Giant Enterprise" by the Ministry of Industry and Information Technology, a "Manufacturing Single-Champion Cultivation Enterprise" by the Department of Industry and Information Technology of Anhui Province, a "Specialized, Refined, Unique, and New Small and Medium-sized Enterprise" in Anhui Province, a "Demonstration Enterprise for Trademark Branding" in Anhui Province, a "Provincial Enterprise Technology Center," the "Third Prize of Anhui Province Science and Technology Award," a "High-tech Enterprise," and one of the "Top Ten Enterprises in Technological Innovation."

Jiahong New Material has advanced experimental equipment and strong testing capability, and established the domestic CSA witness standard laboratory together with the CSA institution, so as to ensure that the performance of self regulating heating cables manufactured by Jiahong meets the requirements of IEEE515 and CSAC22.2130-16. At the same time, the laboratory has reached strategic cooperation with NEPSI, thus officially becoming the IECExOD024 standard laboratory. The IECEx certification body recognizes the results of field tests or witness tests performed using the laboratory's experimental equipment. The electrical tracing products of Jiahong New Material have obtained a number of mainstream international and domestic industry certifications: UL (USA), CSA (Canada), ATEX (EU), IECEx (International Electrotechnical Commission), DNV.GL (Det Norske Veritas), ETL (North America), TUV (Germany), CE (EU), Rohs, UKCA (UK), EAC (Russia), CCC (China), CCS and explosion-proof certification for all series of products in China, which symbolizes that the relevant product quality and testing capability of Jiahong New Material have been recognized by international and domestic

# **Enterprise certification**



Obtained the professional contracting qualification of building electromechanical engineering project installation, completely achieving "turnkey solution" engineering service standard for customer





temperature control devices and accessorie

perienced design engineers, a siderable number of whom hav years of design experience in

onsultation, after-sales aintenance, and long-terr



# Our Mission——Bringing warmth to the world



#### **Creator of security**

- · Anti-freezing of pipes
- · Eaves and gutter snowmelt
- · Snowmelt for roads and ramps

#### **Guide to comfortable**

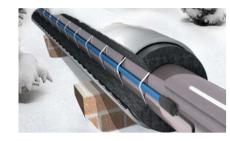
· Underfloor heating

#### Maker of temperature

- Hot water tracing
- · pipeline maintenance

# The Diverse Range of Products Enables Diverse Applications

Jiahong New Material provides a huge product platform that allows different types of customers, applications, and environmental requirements to find suitable products. These products include heating cables and various derivative products, bringing safety and comfort to our production and daily lives. Importantly, Jiahong New Material is an expert in the electrical heat heating industry and an integrated service provider of heat tracing products. Our business team, design team, product development team, and project management team can collaborate with you to provide various types of customized products.















# **Not Just Heating Products...**

In addition to the main heating cables and their derivative products, Jiahong New Material's temperature controller R&D team also offers a range of functional categories of temperature controllers to meet related application needs. This includes Wifienabled temperature controllers, LCD touchscreen temperature controllers, programmable temperature controllers, and more. Each year, we develop around 8 to 10 temperature controller products based on market trends or custom requirements. These temperature controllers support various control methods, such as manual operation, app operation, and motion sensing control, for underfloor heating cables or snow melting temperature controllers. Additionally, we offer temperature controller products for water heating systems, adding a touch of brightness to Jiahong New Material's product portfolio.



#### **About R&D Team**

Jiahong's R&D team consists of innovative experts and engineers dedicated to intelligent thermal management solutions. By combining the latest technological advancements with deep market insights, our team continuously designs and improves temperature controllers and heating cable products to meet the diverse needs of different industries and consumers. From smallscale temperature controllers for home use to industrial-grade high-precision control systems, and from indoor underfloor heating products to outdoor snow melting cable products, Jiahong provides precise, reliable, and user-friendly thermal management solutions across a wide range of fields.









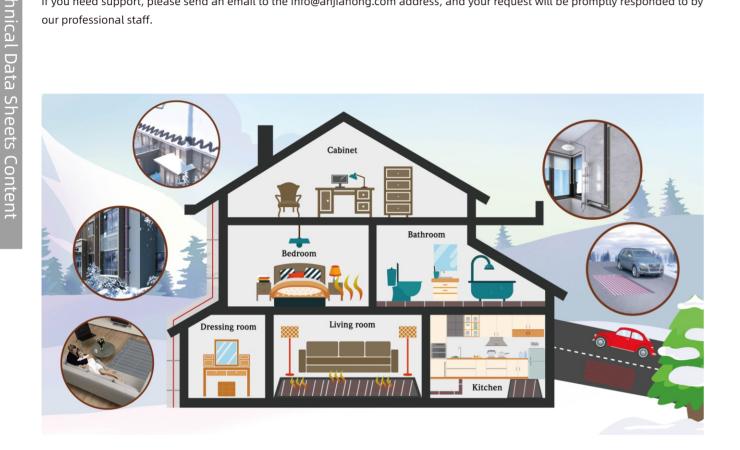




# **Integrated System Products and Round-the-Clock Customer Support**

Beyond heating cables and temperature controllers, Jiahong New Material's technical team provides comprehensive supporting products and engineering service support for these products. Whether customers require individual products or complete solutions, Jiahong New Material strives to meet their needs to the fullest extent. We offer a one-stop service that covers heating cable products, design, production, control, system integration, and more. Furthermore, Jiahong New Material has a team of up to 20 professional staff members who provide round-the-clock support for customers' pre-sales and after-sales needs.

If you need support, please send an email to the info@ahjiahong.com address, and your request will be promptly responded to by our professional staff.



### **Residential and Commercial Products**

- 1. Jiahong New Material offers a wide range of residential and commercial products, including heating cables and kits, geothermal grids, geothermal lines, geothermal mats, and more. 1. The residential and commercial heating cables and their derivative products employ self regulating and constant wattage heating principles. They are widely used in major areas such as floor heating (Minimat), pipe freeze protection (HTM), roof and gutter snow melting (DefrostSnow), road and ramp snow melting (CHS), pipe maintenance (HTR), and hot water heat tracing (HWTM).
- 2. Jiahong New Material also provides essential power connection components, including splice connectors, tee connectors, endsealing components, end seals, and other accessories, which are crucial parts of the entire system integration.
- 3. A separate sample brochure is available for Jiahong New Material's temperature controllers and is not included in this document.



### Main fields of application



Underfloor heating (Minimat)



Snowmelt for roads and ramps (CHS)



Anti-freezing of pipes (HTM)



Pipeline maintenance (HTR)



Eaves and gutter snowmelt (Defrost Snow)



Hot water tracing (HWTM)

# **System Integration Accessories**









nderfloor

eating



The Minimat series of underfloor heating geothermal grid products are the result of a unified approach to comfortable underfloor heating experiences and modular and easy installation methods. When combined with the corresponding underfloor heating temperature controller, it provides users with maximum comfort and the best experience.



#### Minicable series

The Minicable series of underfloor heating cables combine the highest level of comfort with energy efficiency, making it a safe, reliable, and energy-saving underfloor heating product.



#### **Afmat**

AFMAT constant wattage geothermal mat is an ultra-thin product for indoor heating, specially designed for wooden floors. It does not require cement backfilling, resulting in faster heating and reduced space occupation in indoor areas. It provides an efficient heating solution for small-sized residential units and functional spaces with such requirements.



#### WFOH/D

As a mature and reliable heating product, WFOH/D completes the cold-end joint and end production for cables during the factory prefabrication stage, allowing for installation anytime, anywhere. It features low-smoke, halogen-free outer sheathing, HDPE/TPE insulation layer, and tin-plated copper braiding, making it widely applicable for frost protection or process temperature maintenance of various piping and equipment in densely populated areas such as rail transportation, tunnel projects, fire pipelines, hospitals, sports arenas, and large libraries. It can also be used for underfloor heating.



#### TXLP1/2R

TXLP1/2R is a mature and reliable heating product that completes the cold-end joint and end production during the factory prefabrication stage. It can be installed anytime, anywhere. It features a low-smoke, halogen-free (or PVC) outer sheath, cross-linked polyethylene insulation layer, and aluminum foil longitudinal shielding. It is suitable for heat tracing systems in open areas, such as rail transportation, tunnel projects, fire pipelines, pump rooms, for frost protection or process temperature maintenance of pipelines and equipment. It can also be used for underfloor heating and snow melting applications.



#### **JHDM Door Mat**

The heating door mat is an ideal product for localized comfort and cozy heating. It is particularly suitable for shoe cleaning at the entrance of accommodation spaces such as offices, lobbies, halls, and kitchens. The heating mat helps reduce dust and dirt, and it is also used for drying wet shoes. Therefore, the shoes remain dry and clean. Ultimately, it provides warmth to the feet, ensuring comfort and warmth when needed.





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This product can effectively prevent water pipe freezing at temperatures as low as -40°C at room temperature. It features a pioneering pre-installed temperature controller that automatically turns on at low temperatures and off at high temperatures, saving electricity. The temperature control ensures that the product is automatically controlled by the temperature controller and remains powered throughout the winter without the need for user intervention. It can be used for both plastic and metal water pipes.



#### JHSF Heating Cable Kit

The new JHSF comes with a brand new energy-saving thermostat that includes indicator lights to show power connection and operational status. This cable is pre-assembled and can be installed at any time. It prevents pipe freezing and maintains water flow temperature at -40°C. The JHSF cable is suitable for filled plastic and metal water pipes.



#### HTM Heating Kit (In pipe+On pipe)

HTM is a self-regulating parallel connection heating cable that provides safe and reliable protection or temperature maintenance for heating pipes, valves, and flanges, keeping the water flow at -40°F (-40°C). It is used for small-diameter plastic or metal pipes. The HTM heating kit is custom-made and accessorized with HTM heating cable as the main material, allowing for direct installation.



#### **HTLe Heating Kit**

Suitable for residential and commercial building pipe frost protection and snow melting applications, HTLe can be applied in various complex environments. It is safe and reliable, and ensures excellent heating performance. The power can be automatically adjusted based on the installation environment temperature. It is easy to install and can be cut to any desired length as needed.



#### **HTM Self Regulating Heating Cable**

HTM is a self regulating parallel connection heating cable that provides safe and reliable protection or temperature maintenance for heating pipes, valves, and flanges, keeping the water flow at -40°F (-40°C). It is used for small-diameter plastic or metal pipes.



### **SLL Self Regulating Heating Cable**

Jiahong's SLL low-temperature self regulating heating cable is suitable for pipe frost protection (including plastic and metal pipes) in residential and commercial applications, as well as for roof and gutter snow melting. Whether the pipes are installed overhead or buried, this model of product can maintain the temperature of the medium inside the pipes and effectively melt snow on residential roofs and large building gutter areas, preventing potential safety hazards caused by snow accumulation and ice formation. Common applications for SLL low-temperature self regulating heating cable include water pipes, fire sprinkler pipelines, grease waste lines, and similar pipelines, providing frost protection and snow melting.



## **SRL Self Regulating Heating Cable**

Jiahong's SRL low-temperature self regulating heating cable is suitable for pipe frost protection (including plastic and metal pipes) in residential and commercial applications, as well as for roof and gutter snow melting. Whether the pipes are installed overhead or buried, this model of product can maintain the temperature of the medium inside the pipes and effectively melt snow on residential roofs and large building gutter areas, preventing potential safety hazards caused by snow accumulation and ice formation. Common applications for SLL low-temperature self regulating heating cable include water pipes, fire sprinkler pipelines, grease waste lines, and similar pipelines, providing frost protection and snow melting.



#### HTR Self Regulating Heating Cable

Jiahong's HTR low-temperature self regulating heating cable is suitable for frost protection in residential and industrial settings without steam purging and for process temperature maintenance in applications with relatively low maximum operating temperatures, with a maximum process maintenance temperature of up to 65°C. Whether the pipes are installed overhead or buried, this model of product can maintain the temperature of the medium inside the pipes and preserve the medium's phase. Additionally, this product has obtained explosion-proof certifications from authoritative institutions such as NEPSI, IECEx, and ATEX, making it suitable for use in explosion-proof environments as specified in the certification documents.



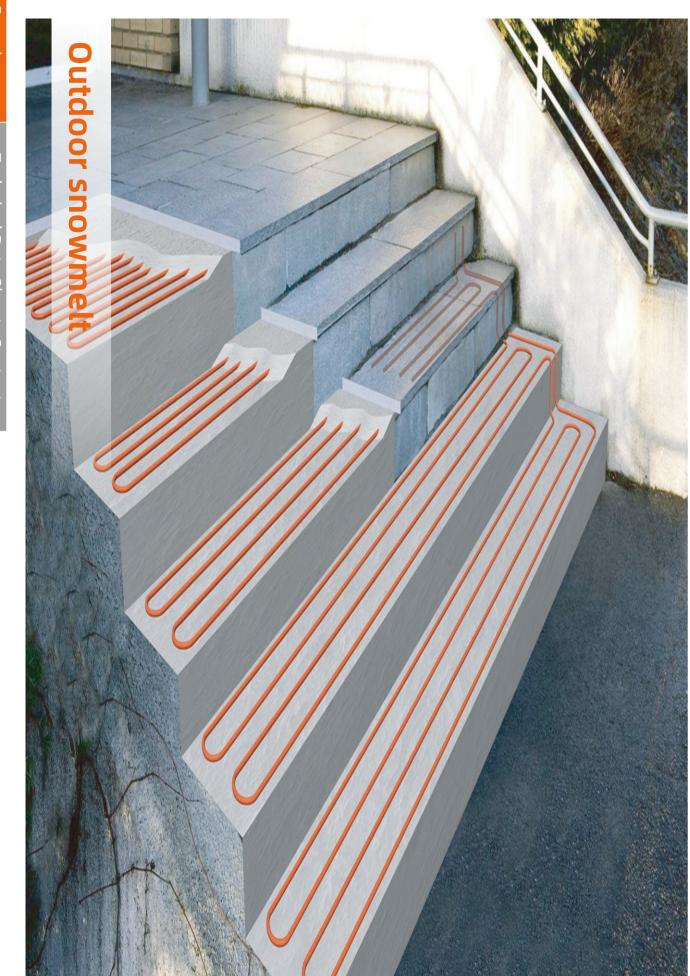
#### **Heat Tracing Water Pipe**

Jiahong's heat tracing water pipe is a special product designed to meet the requirements of water pipe heat tracing under special application conditions. The pipe is made of PVC insulation material certified with NSF61, and the product comes with a prefabricated glass fiber insulation layer, providing moisture-proof insulation, reinforcement, and flame retardant properties.



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# **Outdoor snowmelt**

### **SMC Mat Snow Melting Grid series**

The SMC snow melting mat is a snow melting grid product composed of a high-quality 100% fully shielded dual-conductor cable. It is designed for convenient outdoor snow melting applications and features easy and simple installation. Additionally, it has UV resistance functionality.



### **SMC Cable Snow Melting Cable**

The SMC snow melting cable is a high-quality 100% fully shielded dual-conductor cable with a durable outer sheath (UV stable). Its round shape and robust structure ensure quick, simple, and safe installation in various outdoor applications.



### **Defrost Snow Melting Cable**

Installing the DEFROST SNOW melting cable system provides a permanent solution to snow and ice problems caused by cold weather. It quickly resolves ice and snow issues, ensuring safety and cost savings. It can be applied in driveways, parking lots, sidewalks, stairs, ramps, bridges, and many other areas. It can also be used under concrete, asphalt, stone slabs, or tiles.



#### **CHS Snow Melting Cable**

The C CHS system can also be used to heat building structures assuming they are properly insulated. Since heat accumulates in concrete, it is advantageous to activate the system only when there is insufficient power supply at night. The temperature is controlled by the thermostat function of the central CHS unit with a timer feature.



#### **Rubber Mat**

The rubber snow melting mat provides excellent protection against slipping and offers additional traction with its pattern.

It is particularly beneficial for the elderly and wheelchair users. The snow melting mat continuously melts ice and snow, keeping the surface clean and safe.



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Hot water

tracing

**Hot water tracing** 

The HWTM system is applied in hot water insulation

The system allows users to adjust the set temperature

systems. Different applications differ in temperature

according to their preferences. The HWTM hot water

insulation system provides a control system with features such as closability, programmability, remote control, and the ability to be turned off, aiming to meet your individual needs to the greatest extent possible. The system includes three types of heating cables: HWTM-Y, HWTM-O, and HWTM-R, which are designed to meet the temperature maintenance requirements for different temperature levels

**HWTM Series** 

requirements.

of hot water.

# **Overview**

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# **Minimat Heating Mat Series**

The Minimat series of underfloor heating cable network products is a unified result of comfortable underfloor heating experience and convenient modular installation method. When used in conjunction with the corresponding underfloor heating thermostat, it can bring users the maximum comfort and the best experience.



- Double-Conductor Cables + Single-Point Power Supply
- Easy Installation + Customized Laying
- Zero Electromagnetic Radiation
- Long-Term Warranty
- Suitable for Tile Flooring
- smooth connection will make the product look and work better

#### **Minimat Specifications**

	Minimat D	Minimat F	Minimat E	Minimat A		
Cable structure	dual conduct	ors				
Rated Voltage:	230V					
Output(standard) (1):	100W/m², 150W/m², 200W/m²					
Cable spacing(standard) (2):	80mm ~ 112mm					
Cable Diameter(standard) (3):	3.6mm ~ 4.2mm					
Onductor Insulation(standard):	Fluoropolymer	Fluoropolymer	XLPE	Fluoropolymer		
Outer Insulation(standard):	PVC	Fluoropolymer	PVC	Nylon		
Max. Ambient Temp:	30℃ (85°F)					
Min. Installation Temp:	5°C (40°F)					
Cold lead(standard):	2.5 m					
Smooth Connection applications:	Yes	Yes	Yes	Yes		

- (1) In addition to the three standard output specifications, customers can contact Jiahong's sales representatives to inquire about the possibility of customized specifications.
- (2) The standard cable spacing will be confirmed based on the actual product details.
- (3) The outer diameter of the standard cable will be confirmed based on the actual product details.

#### Ordering Information (MinimatD)

230V	Heated Area	Mat DimensionD	Watts	Amps	Ohms
Catalog Number	m²	m*m	(100W/m <sup>2</sup> .)	Allips	Offilis
MinimatD/100-100-1.0	1	0.5*2	100	0.4	529.0
MinimatD/100-150-1.5	1.5	0.5*3	150	0.7	325.7
MinimatD/100-200-2.0	2	0.5*4	200	0.9	264.5
MinimatD/100-250-2.5	2.5	0.5*5	250	1.1	211.6
MinimatD/100-300-3.0	3	0.5*6	300	1.3	176.3
MinimatD/100-350-3.5	3.5	0.5*7	350	1.5	151.1
MinimatD/100-400-4.0	4	0.5*8	400	1.7	132.3
MinimatD/100-450-4.5	4.5	0.5*9	450	2.0	117.6
MinimatD/100-500-5.0	5	0.5*10	500	2.2	105.8
MinimatD/100-600-6.0	6	0.5*12	600	2.6	88.2
MinimatD/100-700-7.0	7	0.5*14	700	3.0	75.6
MinimatD/100-800-8.0	8	0.5*16	800	3.5	66.1
MinimatD/100-900-9.0	9	0.5*18	900	3.9	58.8
MinimatD/100-1000-10	10	0.5*20	1000	4.3	52.9
MinimatD/100-1200-12	12	0.5*24	1200	5.2	44.1

#### **Ordering Information (MinimatD)**

230V	Heated Area	Mat DimensionD	Watts	Amns	Ohms
Catalog Number	m²	m*m	(150W/m <sup>2</sup> .)	Amps	Offilis
MinimatD/150-150-1.0	1	0.5*2	150	0.7	352.7
MinimatD/150-225-1.5	1.5	0.5*3	225	1	235.1
MinimatD/150-300-2.0	2	0.5*4	300	1.3	176.3
MinimatD/150-375-2.5	2.5	0.5*5	375	1.6	141.1
MinimatD/150-450-3.0	3	0.5*6	450	2	117.6
MinimatD/150-525-3.5	3.5	0.5*7	525	2.3	100.8
MinimatD/150-600-4.0	4	0.5*8	600	2.6	88.2
MinimatD/150-675-4.5	4.5	0.5*9	675	2.9	78.4
MinimatD/150-750-5.0	5	0.5*10	750	3.3	70.5
MinimatD/150-900-6.0	6	0.5*12	900	3.9	58.8
MinimatD/150-1050-7.0	7	0.5*14	1050	4.6	50.4
MinimatD/150-1200-8.0	8	0.5*16	1200	5.2	44.1
MinimatD/150-1350-9.0	9	0.5*18	1350	5.9	39.2
MinimatD/150-1500-10	10	0.5*20	1500	6.5	35.3
MinimatD/150-1800-12	12	0.5*24	1800	7.8	29.4

# **Ordering Information (MinimatD)**

230V	Heated Area	Mat DimensionD	Watts	Amns	Ohms
Catalog Number	m²	m*m	(200W/m <sup>2</sup> .)	Amps	UIIIIS
MinimatD/200-200-1.0	1	0.5*2	200	0.9	264.5
MinimatD/200-300-1.5	1.5	0.5*3	300	1.3	176.3
MinimatD/200-400-2.0	2	0.5*4	400	1.7	132.3
MinimatD/200-500-2.5	2.5	0.5*5	500	2.2	105.8
MinimatD/200-600-3.0	3	0.5*6	600	2.6	88.2
MinimatD/200-700-3.5	3.5	0.5*7	700	3	75.6
MinimatD/200-800-4.0	4	0.5*8	800	3.5	66.1
MinimatD/200-900-4.5	4.5	0.5*9	900	3.9	58.8
MinimatD/200-1000-5.0	5	0.5*10	1000	4.3	52.9
MinimatD/200-1200-6.0	6	0.5*12	1200	5.2	44.1
MinimatD/200-1400-7.0	7	0.5*14	1400	6.1	37.8
MinimatD/200-1600-8.0	8	0.5*16	1600	7	33.1
MinimatD/200-1800-9.0	9	0.5*18	1800	7.8	29.4
MinimatD/200-2000-10	10	0.5*20	2000	8.7	26.5
MinimatD/200-2400-12	12	0.5*24	2400	10.4	22

# Ordering Information (MinimatF)

230V	Heated Area	Mat DimensionF	Watts	Amns	Ohms
Catalog Number	m²	m*m	(100W/m <sup>2</sup> .)	Amps	OIIIIIS
MinimatF/100-100-1.0	1	0.5*2	100	0.4	529.0
MinimatF/100-150-1.5	1.5	0.5*3	150	0.7	325.7
MinimatF/100-200-2.0	2	0.5*4	200	0.9	264.5
MinimatF/100-250-2.5	2.5	0.5*5	250	1.1	211.6
MinimatF/100-300-3.0	3	0.5*6	300	1.3	176.3
MinimatF/100-350-3.5	3.5	0.5*7	350	1.5	151.1
MinimatF/100-400-4.0	4	0.5*8	400	1.7	132.3
MinimatF/100-450-4.5	4.5	0.5*9	450	2.0	117.6
MinimatF/100-500-5.0	5	0.5*10	500	2.2	105.8
MinimatF/100-600-6.0	6	0.5*12	600	2.6	88.2
MinimatF/100-700-7.0	7	0.5*14	700	3.0	75.6
MinimatF/100-800-8.0	8	0.5*16	800	3.5	66.1
MinimatF/100-900-9.0	9	0.5*18	900	3.9	58.8
MinimatF/100-1000-10	10	0.5*20	1000	4.3	52.9
MinimatF/100-1200-12	12	0.5*24	1200	5.2	44.1

# Ordering Information (MinimatF)

230V	Heated Area	Mat DimensionF	Watts	Amns	Ohms
Catalog Number	m²	m*m	(150W/m <sup>2</sup> .)	Amps	OHHIS
MinimatF/150-150-1.0	1	0.5*2	150	0.7	352.7
MinimatF/150-225-1.5	1.5	0.5*3	225	1	235.1
MinimatF/150-300-2.0	2	0.5*4	300	1.3	176.3
MinimatF/150-375-2.5	2.5	0.5*5	375	1.6	141.1
MinimatF/150-450-3.0	3	0.5*6	450	2	117.6
MinimatF/150-525-3.5	3.5	0.5*7	525	2.3	100.8
MinimatF/150-600-4.0	4	0.5*8	600	2.6	88.2
MinimatF/150-675-4.5	4.5	0.5*9	675	2.9	78.4
MinimatF/150-750-5.0	5	0.5*10	750	3.3	70.5
MinimatF/150-900-6.0	6	0.5*12	900	3.9	58.8
MinimatF/150-1050-7.0	7	0.5*14	1050	4.6	50.4
MinimatF/150-1200-8.0	8	0.5*16	1200	5.2	44.1
MinimatF/150-1350-9.0	9	0.5*18	1350	5.9	39.2
MinimatF/150-1500-10	10	0.5*20	1500	6.5	35.3
MinimatF/150-1800-12	12	0.5*24	1800	7.8	29.4

# Ordering Information (MinimatF)

230V	Heated Area	Mat DimensionF	\\/attc		
	m <sup>2</sup>		Watts (200W/m².)	Amps	Ohms
Catalog Number	m-	m*m	(2001171111)		
MinimatF/200-200-1.0	1	0.5*2	200	0.9	264.5
MinimatF/200-300-1.5	1.5	0.5*3	300	1.3	176.3
MinimatF/200-400-2.0	2	0.5*4	400	1.7	132.3
MinimatF/200-500-2.5	2.5	0.5*5	500	2.2	105.8
MinimatF/200-600-3.0	3	0.5*6	600	2.6	88.2
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MinimatF/200-800-4.0	4	0.5*8	800	3.5	66.1
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MinimatF/200-1000-5.0	5	0.5*10	1000	4.3	52.9
MinimatF/200-1200-6.0	6	0.5*12	1200	5.2	44.1
MinimatF/200-1400-7.0	7	0.5*14	1400	6.1	37.8
MinimatF/200-1600-8.0	8	0.5*16	1600	7	33.1
MinimatF/200-1800-9.0	9	0.5*18	1800	7.8	29.4
MinimatF/200-2000-10	10	0.5*20	2000	8.7	26.5
MinimatF/200-2400-12	12	0.5*24	2400	10.4	22

# **Ordering Information (MinimatE)**

230V	Heated Area	Mat DimensionE	Watts	Amns	Ohms
Catalog Number	m²	m*m	(100W/m <sup>2</sup> .)	Amps	Ullilis
MinimatE/100-100-1.0	1	0.5*2	100	0.4	529.0
MinimatE/100-150-1.5	1.5	0.5*3	150	0.7	325.7
MinimatE/100-200-2.0	2	0.5*4	200	0.9	264.5
MinimatE/100-250-2.5	2.5	0.5*5	250	1.1	211.6
MinimatE/100-300-3.0	3	0.5*6	300	1.3	176.3
MinimatE/100-350-3.5	3.5	0.5*7	350	1.5	151.1
MinimatE/100-400-4.0	4	0.5*8	400	1.7	132.3
MinimatE/100-450-4.5	4.5	0.5*9	450	2.0	117.6
MinimatE/100-500-5.0	5	0.5*10	500	2.2	105.8
MinimatE/100-600-6.0	6	0.5*12	600	2.6	88.2
MinimatE/100-700-7.0	7	0.5*14	700	3.0	75.6
MinimatE/100-800-8.0	8	0.5*16	800	3.5	66.1
MinimatE/100-900-9.0	9	0.5*18	900	3.9	58.8
MinimatE/100-1000-10	10	0.5*20	1000	4.3	52.9
MinimatE/100-1200-12	12	0.5*24	1200	5.2	44.1

# Ordering Information (MinimatE)

230V	Heated Area	Mat DimensionE	Watts	Amns	Ohms
Catalog Number	m²	m*m	(150W/m <sup>2</sup> .)	Amps	OHIHIS
MinimatE/150-150-1.0	1	0.5*2	150	0.7	352.7
MinimatE/150-225-1.5	1.5	0.5*3	225	1	235.1
MinimatE/150-300-2.0	2	0.5*4	300	1.3	176.3
MinimatE/150-375-2.5	2.5	0.5*5	375	1.6	141.1
MinimatE/150-450-3.0	3	0.5*6	450	2	117.6
MinimatE/150-525-3.5	3.5	0.5*7	525	2.3	100.8
MinimatE/150-600-4.0	4	0.5*8	600	2.6	88.2
MinimatE/150-675-4.5	4.5	0.5*9	675	2.9	78.4
MinimatE/150-750-5.0	5	0.5*10	750	3.3	70.5
MinimatE/150-900-6.0	6	0.5*12	900	3.9	58.8
MinimatE/150-1050-7.0	7	0.5*14	1050	4.6	50.4
MinimatE/150-1200-8.0	8	0.5*16	1200	5.2	44.1
MinimatE/150-1350-9.0	9	0.5*18	1350	5.9	39.2
MinimatE/150-1500-10	10	0.5*20	1500	6.5	35.3
MinimatE/150-1800-12	12	0.5*24	1800	7.8	29.4

# Ordering Information (MinimatE)

230V	Heated Area	Mat DimensionE	Watts	Amns	Ohms
Catalog Number	m²	m*m	(200W/m <sup>2</sup> .)	Amps	OHHIS
MinimatE/200-200-1.0	1	0.5*2	200	0.9	264.5
MinimatE/200-300-1.5	1.5	0.5*3	300	1.3	176.3
MinimatE/200-400-2.0	2	0.5*4	400	1.7	132.3
MinimatE/200-500-2.5	2.5	0.5*5	500	2.2	105.8
MinimatE/200-600-3.0	3	0.5*6	600	2.6	88.2
MinimatE/200-700-3.5	3.5	0.5*7	700	3	75.6
MinimatE/200-800-4.0	4	0.5*8	800	3.5	66.1
MinimatE/200-900-4.5	4.5	0.5*9	900	3.9	58.8
MinimatE/200-1000-5.0	5	0.5*10	1000	4.3	52.9
MinimatE/200-1200-6.0	6	0.5*12	1200	5.2	44.1
MinimatE/200-1400-7.0	7	0.5*14	1400	6.1	37.8
MinimatE/200-1600-8.0	8	0.5*16	1600	7	33.1
MinimatE/200-1800-9.0	9	0.5*18	1800	7.8	29.4
MinimatE/200-2000-10	10	0.5*20	2000	8.7	26.5
MinimatE/200-2400-12	12	0.5*24	2400	10.4	22

# Ordering Information (MinimatA)

230V	Heated Area	Mat DimensionA	Watts		
Catalog Number	m²	m*m	(100W/m <sup>2</sup> .)	Amps	Ohms
MinimatA/100-100-1.0	1	0.5*2	100	0.4	529.0
MinimatA/100-150-1.5	1.5	0.5*3	150	0.7	325.7
MinimatA/100-200-2.0	2	0.5*4	200	0.9	264.5
MinimatA/100-250-2.5	2.5	0.5*5	250	1.1	211.6
MinimatA/100-300-3.0	3	0.5*6	300	1.3	176.3
MinimatA/100-350-3.5	3.5	0.5*7	350	1.5	151.1
MinimatA/100-400-4.0	4	0.5*8	400	1.7	132.3
MinimatA/100-450-4.5	4.5	0.5*9	450	2.0	117.6
MinimatA/100-500-5.0	5	0.5*10	500	2.2	105.8
MinimatA/100-600-6.0	6	0.5*12	600	2.6	88.2
MinimatA/100-700-7.0	7	0.5*14	700	3.0	75.6
MinimatA/100-800-8.0	8	0.5*16	800	3.5	66.1
MinimatA/100-900-9.0	9	0.5*18	900	3.9	58.8
MinimatA/100-1000-10	10	0.5*20	1000	4.3	52.9
MinimatA/100-1200-12	12	0.5*24	1200	5.2	44.1

Anti-freezing of pipes

# **Ordering Information (MinimatA)**

230V	Heated Area	Mat DimensionA	Watts	Amns	Ohms	
Catalog Number	m²	m*m	(150W/m <sup>2</sup> .)	Amps	UTITIS	
MinimatA/150-150-1.0	1	0.5*2	150	0.7	352.7	
MinimatA/150-225-1.5	1.5	0.5*3	225	1	235.1	
MinimatA/150-300-2.0	2	0.5*4	300	1.3	176.3	
MinimatA/150-375-2.5	2.5	0.5*5	375	1.6	141.1	
MinimatA/150-450-3.0	3	0.5*6	450	2	117.6	
MinimatA/150-525-3.5	3.5	0.5*7	525	2.3	100.8	
MinimatA/150-600-4.0	4	0.5*8	600	2.6	88.2	
MinimatA/150-675-4.5	4.5	0.5*9	675	2.9	78.4	
MinimatA/150-750-5.0	5	0.5*10	750	3.3	70.5	
MinimatA/150-900-6.0	6	0.5*12	900	3.9	58.8	
MinimatA/150-1050-7.0	7	0.5*14	1050	4.6	50.4	
MinimatA/150-1200-8.0	8	0.5*16	1200	5.2	44.1	
MinimatA/150-1350-9.0	9	0.5*18	1350	5.9	39.2	
MinimatA/150-1500-10	10	0.5*20	1500	6.5	35.3	
MinimatA/150-1800-12	12	0.5*24	1800	7.8	29.4	

230V	Heated Area	Mat DimensionA	Watts	Amns	Ohms	
Catalog Number	m²	m*m	(200W/m <sup>2</sup> .)	Amps	UIIIIIS	
MinimatA/200-200-1.0	1	0.5*2	200	0.9	264.5	
MinimatA/200-300-1.5	1.5	0.5*3	300	1.3	176.3	
MinimatA/200-400-2.0	2	0.5*4	400	1.7	132.3	
MinimatA/200-500-2.5	2.5	0.5*5	500	2.2	105.8	
MinimatA/200-600-3.0	3	0.5*6	600	2.6	88.2	
MinimatA/200-700-3.5	3.5	0.5*7	700	3	75.6	
MinimatA/200-800-4.0	4	0.5*8	800	3.5	66.1	
MinimatA/200-900-4.5	4.5	0.5*9	900	3.9	58.8	
MinimatA/200-1000-5.0	5	0.5*10	1000	4.3	52.9	
MinimatA/200-1200-6.0	6	0.5*12	1200	5.2	44.1	
MinimatA/200-1400-7.0	7	0.5*14	1400	6.1	37.8	
MinimatA/200-1600-8.0	8	0.5*16	1600	7	33.1	
MinimatA/200-1800-9.0	9	0.5*18	1800	7.8	29.4	
MinimatA/200-2000-10	10	0.5*20	2000	8.7	26.5	
MinimatA/200-2400-12	12	0.5*24	2400	10.4	22	

### Warranty

Cable/Mat: 25 years limited warranty against defects in material, design, or workmanship.







# **AFMAT Floor Heating Mat Series**

Combined the highest comfort levels with maximum energy efficiency. It's a proven technology that's safe, reliable and energy efficient.





- For laminate floor and under carpet heating
- Single point connection
- Emits zero EMF (electromagnetic fields)
- Durable construction

- Twin-conductor cable
- Flexible installation
- 25 years limited warranty
- The AFMAT floor warming system includes a fluoropolymer insulated heating cable woven into a specially reinforced aluminum foil that allows for simple roll-out installation without worrying about heating cable spacing.

### **AFMAT Specifications**

Cable Construction:	Twin conductor
Rated Voltage:	230V
Output:	80W/m², 100W/m², 140W/m², 150W/m², 160W/m², 200W/m²
Cable spacing:	50mm
Cable Diameter:	1.0mm
Conductor Insulation:	Fluoropolymer
Max. Ambient Temp:	85°F(30°C)
Min. Installation Temp:	40°F(5°C)
Cold lead:	2-wire plus ground, 2.5m length
Smooth Connection applications:	Yes

#### Ordering Information (AF-MAT)

230V	Heated Area	Mat Dimensions	Watts	Amns	Ohms	
Catalog Number	m²	m*m	(80W/m <sup>2</sup> .)	Amps	Offilia	
AFmat/80-80-1.0	1.0	0.5*2	80	0.3	661.3	
AFmat/80-120-1.5	1.5	0.5*3	120	0.5	440.8	
AFmat/80-160-2.0	2.0	0.5*4	160	0.7	330.6	
AFmat/80-200-2.5	2.5	0.5*5	200	0.9	264.5	
AFmat/80-240-3.0	3.0	0.5*6	240	1.0	220.4	
AFmat/80-280-3.5	3.5	0.5*7	280	1.2	188.9	
AFmat/80-320-4.0	4.0	0.5*8	320	1.4	165.3	
AFmat/80-360-4.5	4.5	0.5*9	360	1.6	146.9	
AFmat/80-400-5.0	5.0	0.5*10	400	1.7	132.3	
AFmat/80-480-6.0	6.0	0.5*12	480	2.1	110.2	
AFmat/80-560-7.0	7.0	0.5*14	560	2.4	94.5	
AFmat/80-640-8.0	8.0	0.5*16	640	2.8	82.7	
AFmat/80-720-9.0	9.0	0.5*18	720	3.1	73.5	
AFmat/80-800-10	10	0.5*20	800	3.5	66.1	
AFmat/80-960-12	12	0.5*24	960	4.2	55.1	

#### Ordering Information (AF-MAT)

230V	Heated Area	Mat Dimensions	Watts	Amns	Ohms
Catalog Number	m²	m*m	(100W/m <sup>2</sup> .)	Amps	Offilis
AFmat/100-100-1.0	1.0	0.5*2	100	0.4	529
AFmat/100-150-1.5	1.5	0.5*3	150	0.7	353.7
AFmat/100-200-2.0	2.0	0.5*4	200	0.9	264.5
AFmat/100-250-2.5	2.5	0.5*5	250	1.1	211.6
AFmat/100-300-3.0	3.0	0.5*6	300	1.3	176.3
AFmat/100-350-3.5	3.5	0.5*7	350	1.5	151.1
AFmat/100-400-4.0	4.0	0.5*8	400	1.7	132.3
AFmat/100-450-4.5	4.5	0.5*9	450	2	117.6
AFmat/100-500-5.0	5.0	0.5*10	500	2.2	105.8
AFmat/100-600-6.0	6.0	0.5*12	600	2.6	88.2
AFmat/100-700-7.0	7.0	0.5*14	700	3	75.6
AFmat/100-800-8.0	8.0	0.5*16	800	3.5	66.1
AFmat/100-900-9.0	9.0	0.5*18	900	3.9	58.8
AFmat/100-1000-10	10	0.5*20	1000	4.3	52.9
AFmat/100-1200-12	12	0.5*24	1200	5.2	44.1

# Ordering Information (AF-MAT)

230V	Heated Area	Mat Dimensions	Watts	Amps	Ohms	
Catalog Number	m²	m*m	(140W/m <sup>2</sup> .)	Allips	Olillis	
AFmat/140-140-1.0	1.0	0.5*2	140	0.6	377.9	
AFmat/140-210-1.5	1.5	0.5*3	210	0.9	251.9	
AFmat/140-280-2.0	2.0	0.5*4	280	1.2	188.9	
AFmat/140-350-2.5	2.5	0.5*5	350	1.5	151.1	
AFmat/140-420-3.0	3.0	0.5*6	420	1.8	126.0	
AFmat/140-490-3.5	3.5	0.5*7	490	2.1	108.0	
AFmat/140-560-4.0	4.0	0.5*8	560	2.4	94.5	
AFmat/140-630-4.5	4.5	0.5*9	630	2.7	84.0	
AFmat/140-700-5.0	5.0	0.5*10	700	3.0	75.6	
AFmat/140-840-6.0	6.0	0.5*12	840	3.7	63.0	
AFmat/140-980-7.0	7.0	0.5*14	980	4.3	54.0	
AFmat/140-1120-8.0	8.0	0.5*16	1120	2.8	47.2	
AFmat/140-1260-9.0	9.0	0.5*18	1260	3.1	42.0	
AFmat/140-1400-10	10	0.5*20	1400	3.5	37.8	
AFmat/140-1680-12	12	0.5*24	1680	4.2	31.5	

# Ordering Information (AF-MAT)

230V	Heated Area	Mat Dimensions	Watts	Amns	Ohms
Catalog Number	m²	m*m	(150W/m <sup>2</sup> .)	Amps	Offilis
AFmat/150-150-1.0	1.0	0.5*2	150	0.7	352.7
AFmat/150-225-1.5	1.5	0.5*3	225	1.0	235.1
AFmat/150-300-2.0	2.0	0.5*4	300	1.3	176.3
AFmat/150-375-2.5	2.5	0.5*5	375	1.6	141.1
AFmat/150-450-3.0	3.0	0.5*6	450	2.0	117.6
AFmat/150-525-3.5	3.5	0.5*7	525	2.3	100.8
AFmat/150-600-4.0	4.0	0.5*8	600	2.6	88.2
AFmat/150-675-4.5	4.5	0.5*9	675	2.9	78.4
AFmat/150-750-5.0	5.0	0.5*10	750	3.3	70.5
AFmat/150-900-6.0	6.0	0.5*12	900	3.9	58.8
AFmat/150-1050-7.0	7.0	0.5*14	1050	4.6	50.4
AFmat/150-1200-8.0	8.0	0.5*16	1200	5.2	44.1
AFmat/150-1350-9.0	9.0	0.5*18	1350	5.9	39.2
AFmat/150-1500-10	10	0.5*20	1500	6.5	35.3
AFmat/150-1800-12	12	0.5*24	1800	7.8	29.4

# Ordering Information (AF-MAT)

230V	Heated Area	Mat Dimensions	Watts	Amps	Ohms	
Catalog Number	m²	m*m	(160W/m <sup>2</sup> .)	Allips	OIIIIis	
AFmat/160-160-1.0	1.0	0.5*2	160	0.7	330.6	
AFmat/160-240-1.5	1.5	0.5*3	240	1	220.4	
AFmat/160-320-2.0	2.0	0.5*4	320	1.4	165.3	
AFmat/160-400-2.5	2.5	0.5*5	400	1.7	132.3	
AFmat/160-480-3.0	3.0	0.5*6	480	2.1	110.2	
AFmat/160-560-3.5	3.5	0.5*7	560	2.4	94.5	
AFmat/160-640-4.0	4.0	0.5*8	640	2.8	82.7	
AFmat/160-720-4.5	4.5	0.5*9	720	3.1	73.5	
AFmat/160-800-5.0	5.0	0.5*10	800	3.8	66.1	
AFmat/160-960-6.0	6.0	0.5*12	960	4.2	55.1	
AFmat/160-1120-7.0	7.0	0.5*14	1120	4.9	47.2	
AFmat/160-1280-8.0	8.0	0.5*16	1280	5.6	41.3	
AFmat/160-1440-9.0	9.0	0.5*18	1440	6.3	36.7	
AFmat/160-1600-10	10	0.5*20	1600	7	33.1	
AFmat/160-1760-12	12	0.5*24	1760	8.3	27.6	

# Ordering Information (AF-MAT)

230V	Heated Area	Mat Dimensions	Watts	Amps	Ohms
Catalog Number	m²	m*m	(200W/m <sup>2</sup> .)	Allips	Offilis
AFmat/200-200-1.0	1.0	0.5*2	200	0.9	264.5
AFmat/200-300-1.5	1.5	0.5*3	300	1.3	176.3
AFmat/200-400-2.0	2.0	0.5*4	400	1.7	132.3
AFmat/200-500-2.5	2.5	0.5*5	500	2.2	105.8
AFmat/200-600-3.0	3.0	0.5*6	600	2.6	88.2
AFmat/200-700-3.5	3.5	0.5*7	700	3	75.6
AFmat/200-800-4.0	4.0	0.5*8	800	3.5	66.1
AFmat/200-900-4.5	4.5	0.5*9	900	3.9	58.8
AFmat/200-1000-5.0	5.0	0.5*10	1000	4.3	52.9
AFmat/200-1200-6.0	6.0	0.5*12	1200	5.2	44.1
AFmat/200-1400-7.0	7.0	0.5*14	1400	6.1	37.8
AFmat/200-1600-8.0	8.0	0.5*16	1600	7	33.1
AFmat/200-1800-9.0	9.0	0.5*18	1800	7.8	29.4
AFmat/200-2000-10	10	0.5*20	2000	8.7	26.5
AFmat/200-2400-12	12	0.5*24	2400	10.4	22

#### Warranty

25 years limited warranty against defects in material, design, or workmanship.

### **Approvals**



# Minicable Twin Condutor Heating Cable Series

Combined the highest comfort levels with maximum energy efficiency. It's a proven technology that's safe, reliable and and energy effcient.





- Single point connection
- Emits zero EMF(electromagnetic fields)
- Safety approved for wet locations
- 25 years limited warranty

- Twin-conductor cable
- Flexible installation
- Durable construction

#### **AFMAT Specifications**

	MiniCable D	MiniCable F	MiniCable G	MiniCable E	MiniCable A
Cable Construction:	Twin conducto	or			
Rated Voltage:	230V				
Output (W/m) :	10, 12, 13.5 15, 18	10, 18	10, 12, 13.5 15, 18	10, 12, 16, 18	12, 18
Cable Diameter:	3.2-4.5mm				
Conductor Insulation:	Fluoropolyme	r & XLPE			
Max. Ambient Temp:	85°F(30°C)				
Min. Installation Temp:	40°F(5°C)				
Cold lead:	2-wire plus ground, 2.5m length				
Smooth Connection applications:	Yes				

# Ordering Information (MiniCable D)

230V	Length (m)	Watts	Amps	Ohms
Catalog Number	3, ( )	(12W/m)		
MiniCable D/12-150	12.5	150	0.7	352.7
MiniCable D/12-225	18.8	225	1.0	235.1
MiniCable D/12-300	25.0	300	1.3	176.3
MiniCable D/12-375	31.3	375	1.6	141.1
MiniCable D/12-450	37.5	450	2.0	117.6
MiniCable D/12-525	43.8	525	2.3	100.8
MiniCable D/12-600	50.0	600	2.6	88.2
MiniCable D/12-675	56.3	675	2.9	78.4
MiniCable D/12-750	62.5	750	3.3	70.5
MiniCable D/12-900	75.0	900	3.9	58.8
MiniCable D/12-1050	87.5	1050	4.6	50.4
MiniCable D/12-1200	100.0	1200	5.2	44.1
MiniCable D/12-1350	112.5	1350	5.9	39.2
MiniCable D/12-1500	125.0	1500	6.5	35.3
MiniCable D/12-1800	150.0	1800	7.8	29.4

# Ordering Information (MiniCable D)

230V	Length (m)	(18W/m)		Ohms
Catalog Number				
MiniCable D/18-135	7.5	135	0.6	391.9
MiniCable D/18-200	11.1	200	0.9	264.5
MiniCable D/18-270	15.0	270	1.2	195.9
MiniCable D/18-400	22.2	400	1.7	132.3
MiniCable D/18-535	29.7	535	2.3	98.9
MiniCable D/18-600	33.3	600	2.6	88.2
MiniCable D/18-680	ble D/18-680 37.8 680		3.0	77.8
MiniCable D/18-800	800 44.4 800 3.		3.5	66.1
MiniCable D/18-935	51.9	935	4.1	56.6
MiniCable D/18-1100	61.1	1100	4.8	48.1
MiniCable D/18-1220	67.8	1220	5.3	43.4
MiniCable D/18-1340	74.4	1340	5.8	39.5
MiniCable D/18-1500	83.3	1500	6.5	35.3
MiniCable D/18-1625	90.3	1625	7.1	32.6
MiniCable D/18-1900	105.6	1900	8.3	27.8
MiniCable D/18-2135	118.6	2135	9.3	24.8
MiniCable D/18-2295	127.5	2295	10.0	23.1
MiniCable D/18-2775	154.2	2775	12.1	19.1

# Ordering Information (MiniCable F)

230V	Length (m)	Watts	Amps	Ohms
Catalog Number	Length (m)	(10W/m)	711103	Giiiis
MiniCable F/10-150	15	150	0.7	352.7
MiniCable F/10-225	22.5	225	1.0	235.1
MiniCable F/10-300	30	300	1.3	176.3
MiniCable F/10-375	37.5	375	1.6	141.1
MiniCable F/10-450	45	450	2.0	117.6
MiniCable F/10-525	52.5	525	2.3	100.8
MiniCable F/10-600	60	600	2.6	88.2
MiniCable F/10-675	67.5	675	2.9	78.4
MiniCable F/10-750	75	750	3.3	70.5
MiniCable F/10-900	90	900	3.9	58.8
MiniCable F/10-1050	105	1050	4.6	50.4
MiniCable F/10-1200	120	1200	5.2	44.1
MiniCable F/10-1350	135	1350	5.9	39.2
MiniCable F/10-1500	150	1500	6.5	35.3
MiniCable F/10-1800	180	1800	7.8	29.4

# Ordering Information (MiniCable G)

230V	Lenath (m)	Length (m) Watts (13.7W/m) Amps		Ohms
Catalog Number				
MiniCable G/13.7-150	10.9	150	0.7	352.7
MiniCable G/13.7-225	16.4	225	1.0	235.1
MiniCable G/13.7-300	21.9	300	1.3	176.3
MiniCable G/13.7-375	27.4	375	1.6	141.1
MiniCable G/13.7-450	MiniCable G/13.7-450 32.8		2.0	117.6
MiniCable G/13.7-525	/13.7-525 38.3 525 2.3		2.3	100.8
MiniCable G/13.7-600	43.8	600	2.6	88.2
MiniCable G/13.7-675	7-675 49.3 675 2.9		2.9	78.4
MiniCable G/13.7-750	Cable G/13.7-750 54.7 750		3.3	70.5
MiniCable G/13.7-900	65.7	900	3.9	58.8
MiniCable G/13.7-1050	76.6	1050	4.6	50.4
MiniCable G/13.7-1200	87.6	1200	5.2	44.1
MiniCable G/13.7-1350	e G/13.7-1350 98.5 1350		5.9	39.2
MiniCable G/13.7-1500	able G/13.7-1500 109.5 1500		6.5	35.3
MiniCable G/13.7-1800	131.4	1800	7.8	29.4

# Ordering Information (MiniCable E)

230V	Length (m)	Watts	Amps	Ohms
Catalog Number	Length (m)	(12W/m)	Allips	Ciliis
MiniCable E/12-150	12.5	150	0.7	352.7
MiniCable E/12-225	18.8	225	1.0	235.1
MiniCable E/12-300	25.0	300	1.3	176.3
MiniCable E/12-375	31.3	375	1.6	141.1
MiniCable E/12-450	37.5	450	2.0	117.6
MiniCable E/12-525	43.8	525	2.3	100.8
MiniCable E/12-600	50.0	600	2.6	88.2
MiniCable E/12-675	56.3	675	2.9	78.4
MiniCable E/12-750	62.5	750	3.3	70.5
MiniCable E/12-900	75.0	900	3.9	58.8
MiniCable E/12-1050	87.5	1050	4.6	50.4
MiniCable E/12-1200	100.0	1200	5.2	44.1
MiniCable E/12-1350	112.5	1350	5.9	39.2
MiniCable E/12-1500	125.0	1500	6.5	35.3
MiniCable E/12-1800	150.0	1800	7.8	29.4

# Ordering Information (MiniCable E)

230V Catalog Number	Length (m)	Watts (18W/m)	Amps	Ohms	
	7.5	125	0.6	201.0	
MiniCable E/18-135	7.5	135	0.6	391.9	
MiniCable E/18-200	11.1	200	0.9	264.5	
MiniCable E/18-270	15.0	270	1.2	195.9	
MiniCable E/18-400	22.2	400	1.7	132.3	
MiniCable E/18-535	29.7	535	2.3	98.9	
MiniCable E/18-600	33.3	600	2.6	88.2	
MiniCable E/18-680	able E/18-680 37.8 680 3		3.0	77.8	
MiniCable E/18-800	300 44.4 800		3.5	66.1	
MiniCable E/18-935	51.9	935	4.1	56.6	
MiniCable E/18-1100	61.1	1100	4.8	48.1	
MiniCable E/18-1220	67.8	1220	5.3	43.4	
MiniCable E/18-1340	74.4	1340	5.8	39.5	
MiniCable E/18-1500	83.3	1500	6.5	35.3	
MiniCable E/18-1625	90.3	1625	7.1	32.6	
MiniCable E/18-1900	le E/18-1900 105.6		8.3	27.8	
MiniCable E/18-2135	118.6	2135	9.3	24.8	
MiniCable E/18-2295	127.5	2295	10.0	23.1	
MiniCable E/18-2775	154.2	2775	12.1	19.1	

### Ordering Information (MiniCable A)

230V	Length (m)	Watts	Amps	Ohms	
Catalog Number	Length (m)	(12W/m)	711103	35	
MiniCable A/12-150	12.5	150	0.7	352.7	
MiniCable A/12-225	18.8	225	1.0	235.1	
MiniCable A/12-300	25.0	300	1.3	176.3	
MiniCable A/12-375	31.3	375	1.6	141.1	
MiniCable A/12-450	37.5	450	2.0	117.6	
MiniCable A/12-525	43.8	525	2.3	100.8	
MiniCable A/12-600	50.0	600	2.6	88.2	
MiniCable A/12-675	56.3	675	2.9	78.4	
MiniCable A/12-750	62.5	750	3.3	70.5	
MiniCable A/12-900	75.0	900	3.9	58.8	
MiniCable A/12-1050	-1050 87.5 1050		4.6	50.4	
MiniCable A/12-1200	100.0	1200	5.2	44.1	
MiniCable A/12-1350	2-1350 112.5		5.9	39.2	
MiniCable A/12-1500	125.0	1500	6.5	35.3	
MiniCable A/12-1800	150.0	1800	7.8	29.4	

# Ordering Information (MiniCable A)

230V	Length (m)	Watts	Amps	Ohms	
Catalog Number		(18W/m) /(III)			
MiniCable A/18-135	7.5	135	0.6	391.9	
MiniCable A/18-200	11.1	200	0.9	264.5	
MiniCable A/18-270	15.0	270	1.2	195.9	
MiniCable A/18-400	22.2	400	1.7	132.3	
MiniCable A/18-535	29.7	535	2.3	98.9	
MiniCable A/18-600	33.3	600	2.6	88.2	
MiniCable A/18-680	ble A/18-680 37.8 680		3.0	77.8	
MiniCable A/18-800	3-800 44.4 800 3.5		3.5	66.1	
MiniCable A/18-935	51.9	935	4.1	56.6	
MiniCable A/18-1100	iCable A/18-1100 61.1		4.8	48.1	
MiniCable A/18-1220	67.8	1220	5.3	43.4	
MiniCable A/18-1340	74.4	1340	5.8	39.5	
MiniCable A/18-1500	83.3	1500	6.5	35.3	
MiniCable A/18-1625	90.3	1625	7.1	32.6	
MiniCable A/18-1900	105.6	1900	8.3	27.8	
MiniCable A/18-2135	118.6	2135	9.3	24.8	
MiniCable A/18-2295	127.5	2295	10.0	23.1	
MiniCable A/18-2775	154.2	2775	12.1	19.1	

#### Warranty

Cable/Mat: 25 years limited warranty against defects in material, design, or workmanship

#### **Approvals**



# Minicable S

Combined the highest comfort levels with maximum energy efficiency. It's a proven technology that's safe, reliable and energy effcient.





- Double point connection
- Very thin, only 2.6 mm
- Flexible installation
- 25 years limited warranty

- Single conductor
- Safety approved for wet locations
- Durable construction

### MiniCable S Specifications

Single conductor
230V
11W/m, 11.5W/m, 12.5W/m, 15W/m
2.5mm-2.8mm
Fluoropolymer
85°F(30°C)
40°F(5°C)
two 2.5m length each
yes

230V Catalog Number	Length (m)	Length (m) Watts (11W/m)		Ohms	
MiniCableS/11-100	9.1	100	0.4	529.0	
Millicables/11-100	9.1	100	0.4	529.0	
MiniCableS/11-200	18.2	200	0.9	264.5	
MiniCableS/11-300	27.3	300	1.3	176.3	
MiniCableS/11-400	36.4	400	1.7	132.3	
MiniCableS/11-500	45.5	500	2.2	105.8	
MiniCableS/11-600	54.5	600	2.6	88.2	
MiniCableS/11-700	63.6	700	3.0	75.6	
MiniCableS/11-800	72.7	800	3.5	66.1	
MiniCableS/11-900	81.8	900	3.9	58.8	
MiniCableS/11-1000	90.9	1000	4.3	52.9	
MiniCableS/11-1200	iniCableS/11-1200 109.1		5.2	44.1	
MiniCableS/11-1500	136.4	1500	6.5	35.3	
MiniCableS/11-1800	163.6	1800	7.8	29.4	

230V	Length (m)	Watts	Amps	Ohms
Catalog Number	Length (m)	(11.5W/m)	Allips	Omms
Minicables/11.5-200	17.4	200	0.9	264.5
Minicables/11.5-300	26.1	300	1.3	176.3
Minicables/11.5-400	34.8	400	1.7	132.3
Minicables/11.5-500	5-500 43.5 500		2.2	105.8
Minicables/11.5-600	52.2	600	2.6	88.2
Minicables/11.5-700	60.9	700	3.0	75.6
Minicables/11.5-800	69.6	800	3.5	66.1
Minicables/11.5-900	78.3	900	3.9	58.8
Minicables/11.5-1000	87.0	1000	4.3	52.9
Minicables/11.5-1250	108.7	1250	5.4	42.3
Minicables/11.5-1500	130.4	1500	6.5	35.3
Minicables/11.5-1750	152.2	1750	7.6	30.2

### Warranty

Cable/Mat: 25 years limited warranty against defects in material, design, or workmanship.

### **Approvals**



# WFOH/D

Combined the highest comfort levels with maximum energy efficiency. It's a proven technology that's safe, reliable and and energy effcient.





- Single point connection
- Emits zero EMF(electromagnetic fields)
- Safety approved for wet locations
- Durable construction

- Twin-conductor cable
- Flexible installation
- 25 years limited warranty
- Don't contain any halogen, WFOH/D Electric Floor Heating Cable System is a good gift for your health

### WFOH/D Specifications

Cable Construction:	Twin conductor			
Rated Voltage:	230V			
Output:	10W/m, 18W/m, 20W/m			
Heating Element Size:	10m to 155m			
Cable Diameter:	4.8-5.6mm			
Conductor Insulation:	XLPE			
Max. Ambient Temp:	85°F(30°C)			
Min. Installation Temp:	40°F(5°C)			
Cold lead:	2.5m length			
Smooth Connection applications:	yes			

230V	Length	Watts	Amps	Ohma	A	Approxima	te heat co	verage (m²	2)
Catalog Number	(m)	(10W/m)	Allips	Ohms	80W/m <sup>2</sup>	100W/m <sup>2</sup>	120W/m <sup>2</sup>	125W/m <sup>2</sup>	150W/m <sup>2</sup>
WFOH/D 100/10	10	100	0.9	242.0	1.3	1.0	0.8	0.8	0.7
WFOH/D 150/10	15	150	1.4	161.3	1.9	1.5	1.3	1.2	1.0
WFOH/D 200/10	20	200	1.8	121.0	2.5	2.0	1.7	1.6	1.3
WFOH/D 250/10	25	250	2.3	96.8	3.1	2.5	2.1	2.0	1.7
WFOH/D 300/10	30	300	2.7	80.7	3.8	3.0	2.5	2.4	2.0
WFOH/D 350/10	35	350	3.2	69.1	4.4	3.5	2.9	2.8	2.3
WFOH/D 425/10	42.5	425	3.9	56.9	5.3	4.3	3.5	3.4	2.8
WFOH/D 500/10	50	500	4.5	48.4	6.3	5.0	4.2	4.0	3.3
WFOH/D 600/10	60	600	5.5	40.3	7.5	6.0	5.0	4.8	4.0
WFOH/D 700/10	70	700	6.4	34.6	8.8	7.0	5.8	5.6	4.7
WFOH/D 800/10	80	800	7.3	30.3	10.0	8.0	6.7	6.4	5.3
WFOH/D 900/10	90	900	8.2	26.9	11.3	9.0	7.5	7.2	6.0
WFOH/D 1000/10	100	1000	9.1	24.2	12.5	10.0	8.3	8.0	6.7
WFOH/D 1100/10	110	1100	10.0	22.0	13.8	11.0	9.2	8.8	7.3
WFOH/D 1200/10	120	1200	10.9	20.2	15.0	12.0	10.0	9.6	8.0
WFOH/D 1300/10	130	1300	11.8	18.6	16.3	13.0	10.8	10.4	8.7
WFOH/D 1400/10	140	1400	12.7	17.3	17.5	14.0	11.7	11.2	9.3
WFOH/D 1550/10	155	1550	14.1	15.6	19.4	15.5	12.9	12.4	10.3
Cable spacing(mm	n) =area(	m²) / lengt	h(m) * 1	000	124.0	100.0	83.3	80.0	66.7

230V	Length	Watts	Amps	Ohms	A	Approxima	te heat co	verage (m	2)
Catalog Number	(m)	(18W/m)	Allips	Ohms	80W/m <sup>2</sup>	100W/m <sup>2</sup>	120W/m <sup>2</sup>	125W/m <sup>2</sup>	150W/m <sup>2</sup>
WFOH/D 180/18	10	180	0.9	242.0	2.3	1.8	1.5	1.4	1.2
WFOH/D 270/18	15	270	1.4	161.3	3.4	2.7	2.3	2.2	1.8
WFOH/D 360/18	20	360	1.8	121.0	4.5	3.6	3.0	2.9	2.4
WFOH/D 450/18	25	450	2.3	96.8	5.6	4.5	3.8	3.6	3.0
WFOH/D 540/18	30	540	2.7	80.7	6.8	5.4	4.5	4.3	3.6
WFOH/D 630/18	35	630	3.2	69.1	7.9	6.3	5.3	5.0	4.2
WFOH/D 765/18	42.5	765	3.9	56.9	9.6	7.7	6.4	6.1	5.1
WFOH/D 900/18	50	900	4.5	48.4	11.3	9.0	7.5	7.2	6.0
WFOH/D 1080/18	60	1080	5.5	40.3	13.5	10.8	9.0	8.6	7.2
WFOH/D 1260/18	70	1260	6.4	34.6	15.8	12.6	10.5	10.1	8.4
WFOH/D 1440/18	80	1440	7.3	30.3	18.0	14.4	12.0	11.5	9.6
WFOH/D 1620/18	90	1620	8.2	26.9	20.3	16.2	13.5	13.0	10.8
WFOH/D 1800/18	100	1800	9.1	24.2	22.5	18.0	15.0	14.4	12.0
WFOH/D 1980/18	110	1980	10.0	22.0	24.8	19.8	16.5	15.8	13.2
WFOH/D 2160/18	120	2160	10.9	20.2	27.0	21.6	18.0	17.3	14.4
WFOH/D 2340/18	130	2340	11.8	18.6	29.3	23.4	19.5	18.7	15.6
WFOH/D 2520/18	140	2520	12.7	17.3	31.5	25.2	21.0	20.2	16.8
WFOH/D 2790/18	155	2790	14.1	15.6	34.9	27.9	23.3	22.3	18.6
Cable spacing(mm	n) =area(	m²) / lengt	h(m) * 1	000	225.0	180.0	150.0	144.0	120.0

230V	Length	Watts	Amps	Ohms		Approxima	te heat co	verage (m	2)
Catalog Number	(m)	(20W/m)	Alliba	Ohms	80W/m <sup>2</sup>	100W/m <sup>2</sup>	120W/m <sup>2</sup>	125W/m <sup>2</sup>	150W/m <sup>2</sup>
WFOH/D 200/20	10	200	0.9	242.0	2.5	2.0	1.7	1.6	1.3
WFOH/D 300/20	15	300	1.4	161.3	3.8	3.0	2.5	2.4	2.0
WFOH/D 400/20	20	400	1.8	121.0	5.0	4.0	3.3	3.2	2.7
WFOH/D 500/20	25	500	2.3	96.8	6.3	5.0	4.2	4.0	3.3
WFOH/D 600/20	30	600	2.7	80.7	7.5	6.0	5.0	4.8	4.0
WFOH/D 700/20	35	700	3.2	69.1	8.8	7.0	5.8	5.6	4.7
WFOH/D 850/20	42.5	850	3.9	56.9	10.6	8.5	7.1	6.8	5.7
WFOH/D 1000/20	50	1000	4.5	48.4	12.5	10.0	8.3	8.0	6.7
WFOH/D 1200/20	60	1200	5.5	40.3	15.0	12.0	10.0	9.6	8.0
WFOH/D 1400/20	70	1400	6.4	34.6	17.5	14.0	11.7	11.2	9.3
WFOH/D 1600/20	80	1600	7.3	30.3	20.0	16.0	13.3	12.8	10.7
WFOH/D 1800/20	90	1800	8.2	26.9	22.5	18.0	15.0	14.4	12.0
WFOH/D 2000/20	100	2000	9.1	24.2	25.0	20.0	16.7	16.0	13.3
WFOH/D 2200/20	110	2200	10.0	22.0	27.5	22.0	18.3	17.6	14.7
WFOH/D 2400/20	120	2400	10.9	20.2	30.0	24.0	20.0	19.2	16.0
WFOH/D 2600/20	130	2600	11.8	18.6	32.5	26.0	21.7	20.8	17.3
WFOH/D 2800/20	140	2800	12.7	17.3	35.0	28.0	23.3	22.4	18.7
WFOH/D 3100/20	155	3100	14.1	15.6	38.8	31.0	25.8	24.8	20.7
Cable spacing(mm	ı) =area(	m²) / lengt	h(m) * 1	000	250.0	200.0	166.7	160.0	133.3

#### Warranty

Cable/Mat: 25 years limited warranty against defects in material, design, or workmanship.



# TXLP/1

#### TXLP/1 Electric Floor Heating Cable System

Combined the highest comfort levels with maximum energy efficiency. It's a proven technology that's safe, reliable and energy efficient.



- Double point connection
- Safety approved for wet locations
- Durable construction

- Single conductor cable
- Flexible installation
- 15 years limited warranty

### **TXLP/1 Specifications**

Cable Construction:	Single conductor
Rated Voltage:	230V
Output:	20W/m
Heating Element Size:	16.2m to 170.5m
Bending radius:	T38mm
Cable Diameter:	6.0-6.5mm
Conductor Insulation:	XLPE
Max. Ambient Temp:	85°F(30°C)
Min. Installation Temp:	40°F(5°C)
Cold lead:	2.5m length each
Smooth Connection applications:	yes

#### **Ordering Information**

230V	Watts	\A//m	Voltago	Longth /m	Ohms	
Catalog Number	Walls	W/m	Voltage	Length/m	Offilis	
TXLP/1 324	324	20.0	230	16.2	161.3	
TXLP/1 432	432	20.0	230	21.6	121.0	
TXLP/1 540	540	20.0	230	27.0	96.8	
TXLP/1 646	646	20.0	230	32.3	80.7	
TXLP/1 754	754	20.0	230	37.7	69.1	
TXLP/1 918	918	20.0	230	45.9	56.9	
TXLP/1 1078	1078	20.0	230	53.9	48.4	
TXLP/1 1300	1300	20.0	230	65.0	40.3	
TXLP/1 1508	1508	20.0	230	75.4	34.6	
TXLP/1 1730	1730	20.0	230	86.5	30.3	
TXLP/1 1900	1900	20.0	230	95.0	27.5	
TXLP/1 2162	2162	20.0	230	108.1	24.2	
TXLP/1 2378	2378	20.0	230	118.9	22.0	
TXLP/1 2598	2598	20.0	230	129.9	20.2	
TXLP/1 2810	2810	20.0	230	140.5	18.6	
TXLP/1 3028	3028	20.0	230	151.4	17.3	
TXLP/1 3410	3410	20.0	230	170.5	15.4	

#### Warranty

Cable/Mat: 15 years limited warranty against defects in material, design, and workmanship.



# TXLP/2R

#### TXLP/2R Electric Floor Heating Cable System

Combined the highest comfort levels with maximum energy efficiency. It's a proven technology that's safe, reliable and energy efficient



- Single point connection
- Emits zero EMF (electromagnetic fields)
- Safety approved for wet locations
- Twin-conductor cable
- Flexible installation
- Durable construction

#### **TXLP/2R Specifications**

Cable Construction:	Twin conductor
Rated Voltage:	230V
Output:	17W/m
Heating Element Size:	17.6m to 194.0m
Bending radius:	38mm
Cable Diameter:	7.0-7.5mm
Conductor Insulation:	XLPE
Max. Ambient Temp:	85°F(30°C)
Min. Installation Temp:	40°F(5°C)
Cold lead:	2.5m length
Smooth Connection applications:	yes

#### **Ordering Information**

230V	Watts	W/m	Voltago	Longth/m	Ohms
Catalog Number	Walls	VV/III	Voltage	Length/m	Offilis
TXLP/2R 326	326	18.5	230	17.6	161.3
TXLP/2R 435	435	18.5	230	23.5	121.0
TXLP/2R 542	542	18.5	230	29.3	96.8
TXLP/2R 651	651	18.5	230	35.2	80.7
TXLP/2R 759	759	18.5	230	41.0	69.1
TXLP/2R 920	920	18.5	230	49.7	57.6
TXLP/2R 1079	1079	18.5	230	58.3	48.4
TXLP/2R 1340	1340	18.5	230	72.4	38.7
TXLP/2R 1495	1495	18.5	230	80.8	35.3
TXLP/2R 1850	1850	18.5	230	100.0	28.5
TXLP/2R 2289	2289	18.5	230	123.7	23.0
TXLP/2R 2858	2858	18.5	230	154.5	18.6
TXLP/2R 3589	3589	18.5	230	194.0	14.7

#### Warranty

Cable/Mat: 15 years limited warranty against defects in material, design, or workmanship.





# JHSD Pipe Heating Cable Series

Pre-assembled and ready to instal, the cable prevents pipes from freezing, keeping water flowing to-40 C.Using an energy saving thermostat, JHSD cables operate on 230 Volts AC and are suitable for use on waterfilled plastic and metal water pipes.





- Keeps water flowing down to-40°C
- Pre-assembled, ready to install

• 2m length cold lead with plug

- With energy saving thermostat
- Each cable consists of tough XLPE inner insulation, AL foil and a continuous ground braid, and weatherresistant PVC (high-low temperature) out jacket.

#### **TXLP/2R Specifications**

Cable Construction:	Twin conductor
Rated Voltage:	230V
Output:	12W/m, 15W/m, 10W/m, 17W/m, 30W/m
Heating Element Size:	2m to 60m
Bending radius:	25mm
Conductor Insulation:	XLPE
Outer Insulation:	PVC
Min. Installation Temp:	-10℃
Cold lead:	2m length with plug
Smooth Connection applications:	yes

#### **Ordering Information**

Catalog Number	Voltage	Cable Length/m	Output W/m	Watts	Amps	Ohms
JHSD-24-2	230	2.0	12	24	0.1	2204.2
JHSD-48-4	230	4.0	12	48	0.2	1102.1
JHSD-72-6	230	6.0	12	72	0.3	734.7
JHSD-96-8	230	8.0	12	96	0.4	551.0
JHSD-120-10	230	10.0	12	120	0.5	440.8
JHSD-180-15	230	15.0	12	180	0.8	293.9
JHSD-240-20	230	20.0	12	240	1.0	220.4
JHSD-300-25	230	25.0	12	300	1.3	176.3

Catalog Number	Voltage	Cable Length/m	Output W/m	Watts	Amps	Ohms
JHSD-30-2	230	2.0	15	30	0.1	1763.3
JHSD-60-4	230	4.0	15	60	0.3	881.7
JHSD-90-6	230	6.0	15	90	0.4	587.8
JHSD-120-8	230	8.0	15	120	0.5	440.8
JHSD-150-10	230	10.0	15	150	0.7	352.7
JHSD-225-15	230	15.0	15	225	1.0	235.1
JHSD-300-20	230	20.0	15	300	1.3	176.3
JHSD-375-25	230	25.0	15	375	1.6	141.1

Catalog Number	Voltage	Cable Length/m	Output W/m	Watts	Amps	Ohms
JHSD-20-2	230	2.0	10	20	0.1	2645
JHSD-40-4	230	4.0	10	40	0.2	1322.5
JHSD-60-6	230	6.0	10	60	0.3	881.7
JHSD-80-8	230	8.0	10	80	0.3	661.3
JHSD-100-10	230	10.0	10	100	0.4	529
JHSD-150-15	230	15.0	10	150	0.7	352.7
JHSD-200-20	230	20.0	10	200	0.9	264.5
JHSD-250-25	230	25.0	10	250	1.1	211.6

Catalog Number	Voltage	Cable Length/m	Output W/m	Watts	Amps	Ohms
JHSD-34-2	230	2.0	17	34	0.1	1555.9
JHSD-68-4	230	4.0	17	68	0.3	777.9
JHSD-102-6	230	6.0	17	102	0.4	518.6
JHSD-136-8	230	8.0	17	136	0.6	389.0
JHSD-170-10	230	10.0	17	170	0.7	311.2
JHSD-255-15	230	15.0	17	255	1.1	207.5
JHSD-340-20	230	20.0	17	340	1.5	155.6
JHSD-425-25	230	25.0	17	425	1.8	124.5

Catalog Number	Voltage	Cable Length/m	Output W/m	Watts	Amps	Ohms
JHSD-60-2	230	2.0	30	60	0.3	881.7
JHSD-120-4	230	4.0	30	120	0.5	440.8
JHSD-180-6	230	6.0	30	180	0.8	293.9
JHSD-240-8	230	8.0	30	240	1	220.4
JHSD-300-10	230	10.0	30	300	1.3	176.3
JHSD-450-15	230	15.0	30	450	2	117.6
JHSD-600-20	230	20.0	30	600	2.6	88.2
JHSD-750-25	230	25.0	30	750	3.3	70.5

#### Warranty

This system can be installed with confidence that it will operate for years without requiring service. All components are made of the highest quality material and are tested during critical points in the manufacturing process.

The JHSD Series system is easy to buy and to install, cable length increments to accommodate many pipe lengths with diameters up to 1.5 ". Simply run the cable straight along the pipe and valves according to the included instructions, affix with a good electrical tape and insulation, then plug into a ground fault protected electrical outlet.

#### **Approvals**











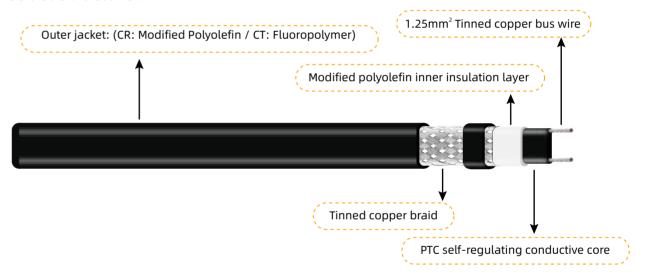


# HTR Self-Regulating Trace Heating Cable

#### Overview:

Jiahong HTR low temperature self-regulating trace heating cable can be used for freeze protection application without steam purge in civil & commercial or industry area, as well as to process temperature maintaince in low level of maximum exposure temperature. The maximum maintaince temperature will be up to 65°C. No matter whether the pipeline is overhead or buried installation, HTR heating cable can maintain the temperature and phase structure of the medium in the pipeline or vessel. HTR heating cable is certified by NEPSI (China), EAC(Russia) and IECEx,ATEX for ex-proof application, as well as to be used in the area which is defined according relative standard.

#### **Product Structure:**



The extruded core tape, which made by parallel tinner copper bus wire and PTC semiconductor polymer heating material, and inner insulation layer of modified polyolefin are added to tinned copper braid and the outer jacket form a complete structure of HTR heating cable, in which the outer jacket can be made of modified polyolefin material (CR) or fluoropolymer material (CT) according to different application or area.

Anti-freezing of pipes

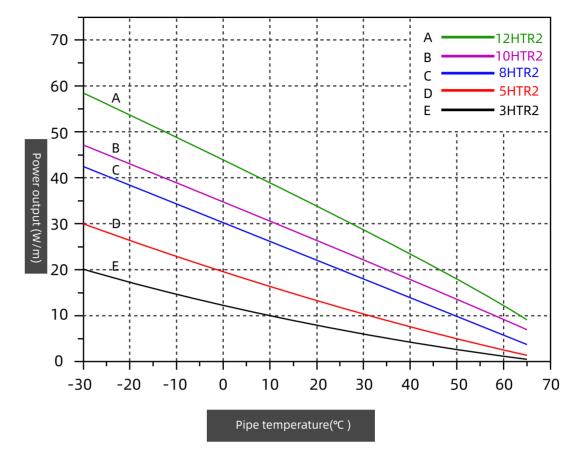
#### **Product Feature:**

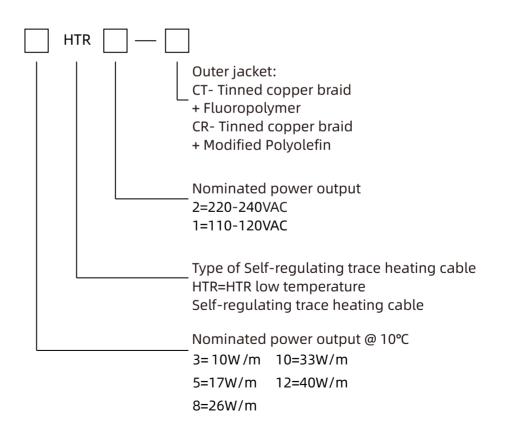
- HTR heating cable is certified by IECEx, ATEX,CSA(Canada),UL(America) NEPS (China) and EAC(Russia), including explosive-proof application, which can be used in the explosive area and ordinary safety area.
- ◆ According to the characteristics of automatic adjustment of power output based on ambient temperature, it can avoid overheating or burning on heating cable even in the case of overlapping installation; Simultaneously this feature can increase the efficiency of the heat tracing system and reduce energy consumption.
- It is allowed to cut arbitrarily within the interval specified by the maximum circuit length and connect with compliance accessories.
- ♦ It has a complete series of accessory, including standard power box, splice/tee connection box and end seal box etc, which can ensure the long service life of the product.
- HTR heating cable has passed a series of test including UV testing according to international standard, which is ensured that the product will not be broken or life reduction due to exposed to the air for a long time without insulation layer installation.

## Technical Specification:

Nominated Voltage:	110-120V (HTR 1) / 220-240V (HTR 2)
Maximum maintaince temperature:	+65°C (150°F)
Maximum withstand temperature:	+85°C (185°F)
Temperature classification:	T5/T6
IP level:	IP66/67
Minimum installation temperature:	-60°C(-76°F)
Minimum bending radius:	30mm
Nominated power output @10°C:	10W/m、17W/m、26W/m、33W/m、40W/m
Dimension:	CR: 12.56mm(W)x5.96mm(T) / CT: 11.96mm(W)x5.36mm(T)
Approvals mark:	EX EHI E LUSTED COLUMN

#### **Approvals mark:**





#### 230V voltage level

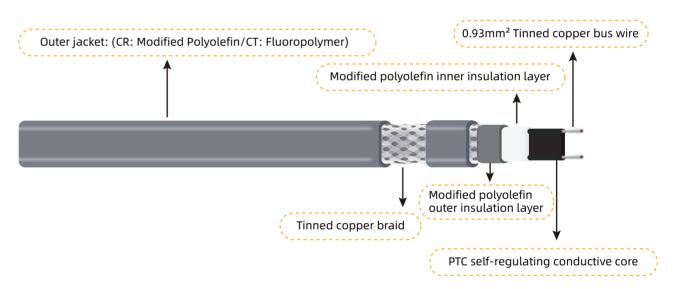
Circuit breaker	Start-up temperature	(Ту	Maxim pe C circuit brea	num circuit leng aker based on IE		ard)
size (A)	size (A) (°C)		5HTR2	8HTR2	10HTR2	12HTR2
	10	200	162	108	85	60
	0	200	148	95	77	54
16	-10	165	133	85	71	50
	-20	155	112	68	65	46
	-40	131	86	60	56	40
	10	200	162	118	106	75
	0	200	162	108	96	68
20	-10	200	152	95	88	62
	-20	185	141	87	81	58
	-40	165	123	76	71	50
	10	200	162	120	115	93
	0	200	162	120	115	85
25	-10	200	162	120	110	78
	-20	200	162	120	102	72
	-40	189	162	112	88	62
	10	200	162	120	115	102
	0	200	162	120	115	102
32	-10	200	162	120	115	100
	-20	200	162	120	115	92
	-40	200	162	120	115	80
	10	200	162	120	115	102
	0	200	162	120	115	102
40	-10	200	162	120	115	102
	-20	200	162	120	115	102
	-40	200	162	120	115	100

# SLL Self-Regulating Trace Heating Cable

#### **Overview:**

Jiahong SLL low temperature self-regulating trace heating cable can be used for pipe antifreeze (including plastic and metal pipes), roof and gutter in residential and commercial applications. No matter whether the pipeline is overhead or buried installation, SLL heating cable can maintain the temperature and phase structure of the medium in the pipeline or vessel, and can also be used for the snow melting and deicing on the roof of residential buildings & buildings and in the gutter area of large buildings as well as to prevent potential safety risk caused by snow; Generally, SLL heating cable is mostly used to freeze protection and snow melting protection on water pipes, fire sprinkler pipes, grease waste pipes and similar pipes.

#### **Product Structure:**



The extruded core tape, which made by parallel tinner copper bus wire and PTC semiconductor polymer heating material, and inner insulation layer of modified polyolefin are added to tinned copper braid and the outer jacket form a complete structure of SLL heating cable, in which the outer jacket can be made of modified polyolefin material (CR) or fluoropolymer material (CT) according to different application or area.

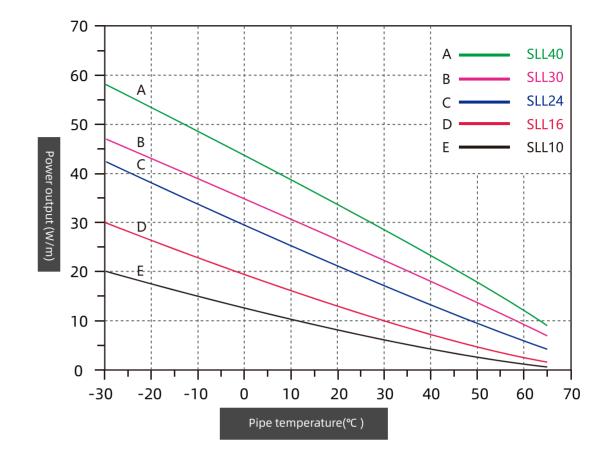
#### **Product Feature:**

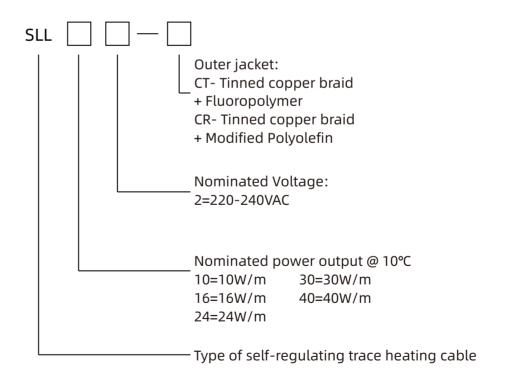
- SLL heating cable is certified by CE (European Union) and EAC (Russian), which can be used in the certified area.
- ♦ According to the characteristics of automatic adjustment of power output based on ambient temperature, it can avoid overheating or burning on heating cable even in the case of overlapping installation; imultaneously this feature can increase the efficiency of the trace heating system and reduce energy consumption.
- It is allowed to cut arbitrarily within the interval specified by the maximum circuit length and connect with compliance accessories.
- ♦ It has a complete series of accessory, including standard power box, splice/tee connection box and end seal box etc, which can ensure the long service life of the product.

#### **Technical Specification:**

Nominated Voltage:	230V (SLL*-2)
Maximum maintaince temperature:	+65°C(150°F)
Maximum withstand temperature:	+85°C (185°F)
Temperature classification:	Т6
IP level:	IP66/67
Minimum installation temperature:	-60°C (-76°F)
Minimum bending radius:	30mm
Nominated power output @10°C:	10W/m, 16W/m, 24W/m, 30W/m, 40W/m
Dimension:	CR: 12.86mm (W) ×6.26mm (T)/CT: 12.46mm (W) ×5.86mm (T)
Approvals mark:	C € EAL

#### Approvals mark:





#### 230V voltage level

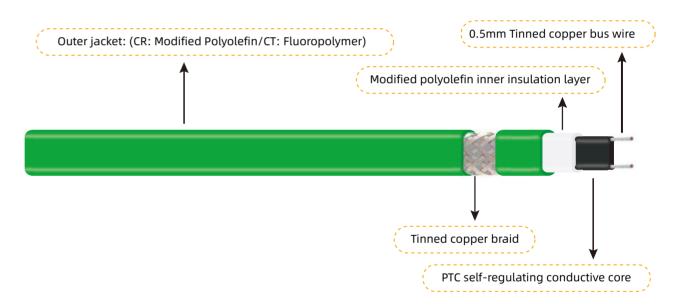
Circuit breaker	Start-up temperature (°C)	(Ту	Maxim pe C circuit brea	num circuit leng aker based on IE		ard)
size (A)	(°C)	SLL10-2	SLL16-2	SLL24-2	SLL30-2	SLL40-2
	10	180	146	83	60	52
	0	180	133	75	54	48
16	-10	149	120	68	46	44
	-20	140	101	61	41	40
	-40	118	77	54	35	34
	10	180	146	106	78	66
	0	180	146	97	65	59
20	-10	180	137	86	59	55
	-20	167	127	78	54	50
	-40	149	111	68	45	43
	10	180	146	108	95	77
	0	180	146	108	83	74
25	-10	180	146	108	72	68
	-20	180	146	108	68	62
	-40	170	146	101	59	54
	10	180	146	108	95	85
	0	180	146	108	95	85
32	-10	180	146	108	95	85
	-20	180	146	108	86	77
	-40	180	146	108	81	68
	10	180	146	108	95	85
	0	180	146	108	95	85
40	-10	180	146	108	95	85
	-20	180	146	108	95	85
	-40	180	146	108	95	85

# HTM Self-Regulating Trace Heating Cable

#### **Overview:**

Jiahong HTM low temperature Self-regulating trace heating cable can be used for pipe antifreeze in residential and commercial applications, and temperature maintaince under maiximum exposure temperature (mainly for small pipe size as similar instrument pipe). No matter whether the pipeline is overhead or buried installation, HTM heating cable can maintain the temperature and phase structure of the medium in the pipeline or vessel; Generally, HTM heating cable is mostly used to freeze protection and snow melting protection on water pipes, instrument pipe and similar pipes.

#### **Product Structure:**



The extruded core tape, which made by parallel tinner copper bus wire and PTC semiconductor polymer heating material, and inner insulation layer of modified polyolefin are added to tinned copper braid and the outer jacket form a complete structure of HTM heating cable, in which the outer jacket can be made of modified polyolefin material (CR) or fluoropolymer material (CT) according to different application or area.

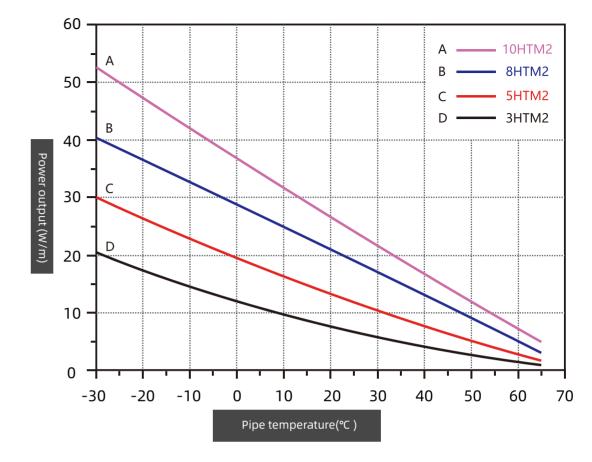
#### **Product Feature:**

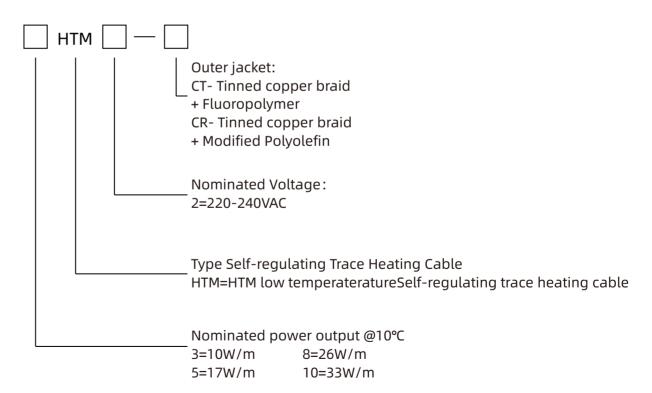
- HTM heating cable is certified by CE (European Union) ETL (North America) and EAC (Russian), which can be used in the certified area.
- According to the characteristics of automatic adjustment of power output based on ambient temperature, it can avoid overheating or burning on heating cable even in the case of overlapping installation; Simultaneously this feature can increase the efficiency of the trace heating system and reduce energy consumption.
- It is allowed to cut arbitrarily within the interval specified by the maximum circuit length and connect with compliance accessories.
- ♦ It has a complete series of accessory, including standard power box, splice/tee connection box and end seal box etc, which can ensure the long service life of the product.

#### **Technical Specification:**

Nominated Voltage:	230V (HTM2)
Maximum maintaince temperature:	+65°C(150°F)
Maximum withstand temperature:	+85°C (185°F)
Temperature classification:	Т6
IP level:	IP66/67
Minimum installation temperature:	-60°C (-76°F)
Minimum bending radius:	30mm
Nominated power output @10°C:	10W/m, 17W/m, 26W/m, 33W/m
Dimension:	CR: 8.3mm (W) ×5.7mm (T)/CT: 7.7mm (W) ×5.1mm (T)
Approvals mark:	CE ON ENE

#### Approvals mark:





#### 230V voltage level

Circuit breaker size (A)	Start-up temperature (°C)	(Type C circ		uit length (m) ed on IEC 60898	3 standard)
3126 (A)	( )	3HTM2	5HTM2	8HTM2	10HTM2
	10	98	78	65	60
	0	98	78	65	58
16	-10	98	65	65	51
	-20	92	59	64	45
	-40	85	45	60	60
	10	98	78	65	60
	0	98	78	65	60
20	-10	98	78	65	60
	-20	98	78	65	60
	-40	98	78	62	54
	10	98	78	65	60
	0	98	78	65	60
25	-10	98	78	65	60
	-20	98	78	65	60
	-40	98	78	65	60
	10	98	78	65	60
	-10	98	78	65	60
32	10	98	78	65	60
	-20	98	78	65	60
	-40	98	78	65	60
	10	98	78	65	60
	0	98	78	65	60
40	-10	98	78	65	60
	-20	98	78	65	60
	-40	98	78	65	60

# 3HTM2-CT Kit Series

### Pre-assembled electric heating cables for pipe freeze protection





#### **GENERAL**

3HTM2-CT KIT Pre-assembled electric trace heating cable are intended for installation on metal or plastic water pipe for freeze protection in commercial locations. The 3HTM2-CT KIT consists of a heating cables and 2m long rubber connection cable with an attachment plug. The self-regulating trace heating cable provides peak heat during cold periods and reduced heat when the air temperature rises.

# **3HTM-CT KIT Specifications**

Rated Voltage:	230V
Output:	3W/m@10℃
Heating Element Size:	1-100m
Bending radius:	12mm
Bus wire gauge:	0.56mm^2
Min. Installation Temp.:	-40℃
Mechanical classification:	M2
Heating lead:	3HTM Self-regulating Trace Heating Cable
Cold lead:	2m length 3G1.0 with plug

Catalog Number	Voltage (V)	Cable Length/m	Watts
3HTM2-CT KIT-1m	230	1	10
3HTM2-CT KIT-2m	230	2	20
3HTM2-CT KIT-3m	230	3	30
3HTM2-CT KIT-4m	230	4	40
3HTM2-CT KIT-5m	230	5	50
3HTM2-CT KIT-6m	230	6	60
3HTM2-CT KIT-7m	230	7	70
3HTM2-CT KIT-8m	230	8	80
3HTM2-CT KIT-10m	230	10	100
3HTM2-CT KIT-13m	230	13	130
3HTM2-CT KIT-15m	230	15	150
3HTM2-CT KIT-19m	230	19	190
3HTM2-CT KIT-20m	230	20	200
3HTM2-CT KIT-25m	230	25	250
3HTM2-CT KIT-30m	230	30	300
3HTM2-CT KIT-40m	230	40	400
3HTM2-CT KIT-50m	230	50	500
3HTM2-CT KIT-60m	230	60	600
3HTM2-CT KIT-70m	230	70	700
3HTM2-CT KIT-80m	230	80	800
3HTM2-CT KIT-90m	230	90	900
3HTM2-CT KIT-100m	230	100	1000

#### **Approvals**









# **SMC & SMM Snowing Melting Product Series**



SMC is an extremely high-quality, 100% fully screened twin conductor cable with a tough outer sheath (UV stable). Its round profile and robust construction ensures a fast, simple and safe installation in multiple outdoor applications.

- Single point connection
- Emits zero EMF (electromagnetic fields)
- Silent, efficient, and safe

- Easy and Flexible installation
- Durable construction
- UV stable
- 20-year limited warranty against manufacturing defects

#### **SMC & SMM Cable Specifications**

Cable Construction:	Round, Twin conductor with 100% screen
Rated Voltage:	230V,400V
Output (SMC):	20W/m, 30W/m, 40W/m
Output (SMM):	200W/m2, 300W/m2, 400W/m2
Heating Element Size (SMC):	5.0m to 263.0m
Heating Element Size (SMM):	0.5m2 to 26.3m2
Max. permissible use temperature, powered:	60℃
Max. permissible use temperature, unpowered:	105℃
Mechanical classification:	M2
Cable Diameter:	6.5mm
Bending radius:	38mm
Cnductor Insulation:	Fluoropolymer
Outer Insulation:	UV protected PVC
Screen:	100% coverage alu-foil
Min. Installation Temp:	-5℃
IP Class:	IP67
Cold lead:	2.5m length
Smooth Connection applications:	Yes

Catalog Number	W/m	Cable length (m)	Catalog Number	W/m²	Dimensions (W x L) (m)	Area (m²)	Output (W) @ 230V	ohms
SMC-125-20-2	20	6.25	SMM-125-200-2	200	0.75*0.8	0.6	125	423.2
SMC-245-20-2	20	12.25	SMM-245-200-2	200	0.75*1.6	1.2	245	215.9
SMC-335-20-2	20	16.75	SMM-335-200-2	200	0.75*2.3	1.7	335	157.9
SMC-505-20-2	20	25.25	SMM-505-200-2	200	0.75*3.3	2.5	505	104.8
SMC-675-20-2	20	33.75	SMM-675-200-2	200	0.75*4.4	3.3	675	78.4
SMC-835-20-2	20	41.75	SMM-835-200-2	200	0.75*5.6	4.2	835	63.4
SMC-1000-20-2	20	50	SMM-1000-200-2	200	0.75*6.7	5.0	1000	52.9
SMC-1200-20-2	20	60	SMM-1200-200-2	200	0.75*8.0	6.0	1200	44.1
SMC-1365-20-2	20	68.25	SMM-1365-200-2	200	0.75*9.1	6.8	1365	38.8
SMC-1700-20-2	20	85	SMM-1700-200-2	200	0.75*11.3	8.5	1700	31.1
SMC-2030-20-2	20	101.5	SMM-2030-200-2	200	0.75*13.5	10.1	2030	26.1
SMC-2360-20-2	20	118	SMM-2360-200-2	200	0.75*15.7	11.8	2360	22.4
SMC-2690-20-2	20	134.5	SMM-2690-200-2	200	0.75*18.0	13.5	2690	19.7
SMC-3035-20-2	20	151.75	SMM-3035-200-2	200	0.75*20.3	15.2	3035	17.4
SMC-3390-20-2	20	169.5	SMM-3390-200-2	200	0.75*22.7	17.0	3390	15.6
SMC-3890-20-2	20	194.5	SMM-3890-200-2	200	0.75*25.9	19.4	3890	13.6

# **Ordering Information**

Catalog Number	W/m	Cable length (m)	Catalog Number	W/m²	Dimensions (W x L) (m)	Area (m²)	Output (W) @ 230V	ohms
SMC-150-30-2	30	5.0	SMM-150-300-2	300	0.75*0.7	0.5	150	352.7
SMC-300-30-2	30	10.0	SMM-300-300-2	300	0.75*1.3	1.0	300	176.3
SMC-400-30-2	30	13.3	SMM-400-300-2	300	0.75*1.9	1.4	400	132.3
SMC-630-30-2	30	21	SMM-630-300-2	300	0.75*2.7	2.0	630	84.0
SMC-830-30-2	30	27.7	SMM-830-300-2	300	0.75*3.6	2.7	830	63.7
SMC-1020-30-2	30	34	SMM-1020-300-2	300	0.75*4.5	3.4	1020	51.9
SMC-1250-30-2	30	40	SMM-1250-300-2	300	0.75*5.3	4.0	1250	42.3
SMC-1350-30-2	30	45	SMM-1350-300-2	300	0.75*6.0	4.5	1350	39.2
SMC-1440-30-2	30	48	SMM-1440-300-2	300	0.75*6.7	5.0	1440	36.7
SMC-1700-30-2	30	56.7	SMM-1700-300-2	300	0.75*7.3	5.5	1700	31.1
SMC-1860-30-2	30	62	SMM-1860-300-2	300	0.75*8.4	6.3	1860	28.4
SMC-2060-30-2	30	68.7	SMM-2060-300-2	300	0.75*9.3	7.0	2060	25.7
SMC-2340-30-2	30	78	SMM-2340-300-2	300	0.75*10.4	7.8	2340	22.6
SMC-2420-30-2	30	80.7	SMM-2420-300-2	300	0.75*11.3	8.5	2420	21.9
SMC-2930-30-2	30	97.7	SMM-2930-300-2	300	0.75*12.7	9.5	2930	18.1
SMC-3290-30-2	30	109.7	SMM-3290-300-2	300	0.75*14.7	11.0	3290	16.1
SMC-3680-30-2	30	122.7	SMM-3680-300-2	300	0.75*16.7	12.5	3680	14.4
SMC-4110-30-2	30	137	SMM-4110-300-2	300	0.75*18.7	14.0	4110	12.9

# **Ordering Information**

Catalog Number	W/m	Cable length (m)	Catalog Number	W/m²	Dimensions (W x L) (m)	Area (m²)	Output (W) @ 230V	ohms
SMC-350-40-2	40	8.75	SMM-350-400-2	400	0.75*1.1	0.9	350	151.1
SMC-470-40-2	40	11.75	SMM-470-400-2	400	0.75*1.6	1.2	470	112.6
SMC-705-40-2	40	17.63	SMM-705-400-2	400	0.75*2.4	1.8	705	75.0
SMC-950-40-2	40	23.75	SMM-950-400-2	400	0.75*3.1	2.4	950	55.7
SMC-1200-40-2	40	30	SMM-1200-400-2	400	0.75*3.9	2.9	1200	44.1
SMC-1430-40-2	40	35.75	SMM-1430-400-2	400	0.75*4.7	3.5	1430	37.0
SMC-1710-40-2	40	42.75	SMM-1710-400-2	400	0.75*5.6	4.2	1710	30.9
SMC-1940-40-2	40	48.5	SMM-1940-400-2	400	0.75*6.4	4.8	1940	27.3
SMC-2170-40-2	40	54.25	SMM-2170-400-2	400	0.75*7.2	5.4	2170	24.4
SMC-2400-40-2	40	60	SMM-2400-400-2	400	0.75*8.0	6.0	2400	22.0
SMC-2860-40-2	40	71.5	SMM-2860-400-2	400	0.75*9.6	7.2	2860	18.5
SMC-3350-40-2	40	83.75	SMM-3350-400-2	400	0.75*11.1	8.3	3350	15.8
SMC-3800-40-2	40	95	SMM-3800-400-2	400	0.75*12.7	9.5	3800	13.9
SMC-4300-40-2	40	107.5	SMM-4300-400-2	400	0.75*14.3	10.7	4300	12.3
SMC-4800-40-2	40	120	SMM-4800-400-2	400	0.75*16.0	12.0	4800	11.0
SMC-5500-40-2	40	137.5	SMM-5500-400-2	400	0.75*18.3	13.7	5500	9.6

# **Ordering Information**

Catalog Number	W/m	Cable length (m)	Catalog Number	W/m²	Dimensions (W x L) (m)	Area (m²)	Output (W) @ 400V	ohms
SMC-215-20-4	20	10.75	SMM-215-200-4	200	0.75*1.4	1.1	215	744.2
SMC-425-20-4	20	21.25	SMM-425-200-4	200	0.75*2.8	2.1	425	376.5
SMC-585-20-4	20	29.25	SMM-585-200-4	200	0.75*3.9	2.9	585	273.5
SMC-870-20-4	20	43.5	SMM-870-200-4	200	0.75*5.9	4.4	870	183.9
SMC-1165-20-4	20	58.25	SMM-1165-200-4	200	0.75*7.7	5.8	1165	137.3
SMC-1450-20-4	20	72.5	SMM-1450-200-4	200	0.75*9.7	7.3	1450	110.3
SMC-1740-20-4	20	87	SMM-1740-200-4	200	0.75*11.6	8.7	1740	92.0
SMC-2085-20-4	20	104.25	SMM-2085-200-4	200	0.75*13.9	10.4	2085	76.7
SMC-2665-20-4	20	133.25	SMM-2665-200-4	200	0.75*17.7	13.3	2665	60.0
SMC-2955-20-4	20	147.75	SMM-2955-200-4	200	0.75*19.7	14.8	2955	54.1
SMC-3530-20-4	20	176.5	SMM-3530-200-4	200	0.75*23.5	17.6	3530	45.3
SMC-4100-20-4	20	205	SMM-4100-200-4	200	0.75*27.3	20.5	4100	39.0
SMC-4700-20-4	20	235	SMM-4700-200-4	200	0.75*31.1	23.3	4700	34.0
SMC-5300-20-4	20	265	SMM-5300-200-4	200	0.75*35.1	26.3	5300	30.2

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Catalog Number	W/m	Cable length (m)	Catalog Number	W/m²	Dimensions (W x L) (m)	Area (m²)	Output (W) @ 400V	ohms
SMC-267-30-4	30	8.9	SMM-267-300-4	300	0.75*1.1	0.9	267	599.3
SMC-520-30-4	30	17.3	SMM-520-300-4	300	0.75*2.3	1.8	520	307.7
SMC-710-30-4	30	23.7	SMM-710-300-4	300	0.75*3.2	2.4	710	225.4
SMC-1090-30-4	30	36.3	SMM-1090-300-4	300	0.75*4.7	3.5	1090	146.8
SMC-1430-30-4	30	47.7	SMM-1430-300-4	300	0.75*6.3	4.7	1430	111.9
SMC-1790-30-4	30	59.7	SMM-1790-300-4	300	0.75*7.9	5.9	1790	89.4
SMC-2160-30-4	30	72	SMM-2160-300-4	300	0.75*9.3	7.0	2160	74.1
SMC-2560-30-4	30	85.3	SMM-2560-300-4	300	0.75*11.3	8.5	2560	62.5
SMC-2910-30-4	30	97	SMM-2910-300-4	300	0.75*12.9	9.7	2910	55.0
SMC-3225-30-4	30	107.5	SMM-3225-300-4	300	0.75*14.7	11.0	3225	49.6
SMC-3640-30-4	30	121.3	SMM-3640-300-4	300	0.75*16.0	12.0	3640	44.0
SMC-4295-30-4	30	143.2	SMM-4295-300-4	300	0.75*19.3	14.5	4295	37.3
SMC-4955-30-4	30	165.2	SMM-4955-300-4	300	0.75*22.7	17.0	4955	32.3
SMC-5770-30-4	30	192.3	SMM-5770-300-4	300	0.75*25.3	19.0	5770	27.7
SMC-6470-30-4	30	215.7	SMM-6470-300-4	300	0.75*28.7	21.5	6470	24.7

Catalog Number	W/m	Cable length (m)	Catalog Number	W/m²	Dimensions (W x L) (m)	Area (m²)	Output (W) @ 400V	ohms
SMC-300-40-4	30	7.5	SMM-300-400-4	400	0.75*1.0	0.8	300	533.3
SMC-600-40-4	30	15.0	SMM-600-400-4	400	0.75*2.0	1.5	600	266.7
SMC-830-40-4	30	20.8	SMM-830-400-4	400	0.75*2.7	2.1	830	192.8
SMC-1240-40-4	30	31.0	SMM-1240-400-4	400	0.75*4.1	3.1	1240	129.0
SMC-1640-40-4	30	41.0	SMM-1640-400-4	400	0.75*5.5	4.1	1640	97.6
SMC-2070-40-4	30	51.8	SMM-2070-400-4	400	0.75*6.8	5.1	2070	77.3
SMC-2480-40-4	30	62	SMM-2480-400-4	400	0.75*8.1	6.1	2480	64.5
SMC-2940-40-4	30	73.5	SMM-2940-400-4	400	0.75*9.9	7.4	2940	54.4
SMC-3360-40-4	30	84.0	SMM-3360-400-4	400	0.75*11.2	8.4	3360	47.6
SMC-3770-40-4	30	94.3	SMM-3770-400-4	400	0.75*12.5	9.4	3770	42.4
SMC-4200-40-4	30	105	SMM-4200-400-4	400	0.75*13.9	10.4	4200	38.1
SMC-5000-40-4	30	125.0	SMM-5000-400-4	400	0.75*16.7	12.5	5000	32.0
SMC-5800-40-4	30	145.0	SMM-5800-400-4	400	0.75*19.3	14.5	5800	27.6
SMC-6600-40-4	30	165.0	SMM-6600-400-4	400	0.75*22.0	16.5	6600	24.2

### **Approvals**

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# Defrost Snow/2R

#### **DEFROST Snow & Ice Melting Cable**

Important Note: These cables are not to be installed in walls or ceilings for anyreason and must be installed by a qualified, licensed electrician.





- Single point connection
- Emits zero EMF(electromagnetic fields)
- Durable construction

- Twin conductor cable
- Easy and Flexible installation
- 10 years limited warranty

# **MiniCable Specifications**

Cable Construction:	Twin conductor
Rated Voltage:	230V
Output:	28W/m, 30W/m
Heating Element Size:	22.9m to 120m
Bending Radius:	50mm
Cable Diameter:	7.6-8.6mm
Conductor Insulation:	XLPE
Outer Insulation:	PVC
Min. Installation Temp.:	40°F(30°C)
Cold Lead:	10m
Smooth Connection applications:	yes

230V	Length (m)	Watts	Amps	Ohms	
Catalog Number	Length (m)	(28W/m)	Allips	Offilia	
DEFROST SNOW/2R 640	22.9	640	2.8	82.7	
DEFROST SNOW/2R 890	31.9	890	3.9	59.4	
DEFROST SNOW/2R 1270	45.4	1271	5.6	41.7	
DEFROST SNOW/2R 1900	68.1	1904	8.3	27.8	
DEFROST SNOW/2R 2700	96.4	2700	11.8	19.6	
DEFROST SNOW/2R 3400	120.0	3400	14.8	15.6	

230V	Length (m)	Watts	Amps	Ohms	
Catalog Number	Length (III)	(28W/m)	Allips	Omins	
DEFROST SNOW/2R 690	24.6	690	3	76.7	
DEFROST SNOW/2R 960	34.3	960	4.2	55.1	
DEFROST SNOW/2R 1360	48.6	1360	5.9	38.9	
DEFROST SNOW/2R 2040	72.9	2040	8.9	25.9	
DEFROST SNOW/2R 2890	103.2	2890	12.6	18.3	
DEFROST SNOW/2R 3600	128.6	3600	15.7	14.7	

#### **Jiahong Kit Contents**

- 1. Defrost Snow&Ice Melting Cable(with two 10m cold leads)
- 2. Instruction Manual
- 3. Warranty Card

#### **Approvals**





# CHS

### CHS Heating cable for hardening/frost protection of concrete



The CHS system can also be used to heat building structures, assuming they have been correctly insulated.

As heat accumulates in concrete, it is advantageous to connect the system up only at night when the electricity rates are favourable. The temperature is controlled via the thermostat of the central CHS unit which also has a timer function.

#### **MiniCable Specifications**

Cable Construction:	Twin conductor
Rated Voltage:	230V
Heating Element Size:	22.9m to 120m
Bending Radius:	50mm
Cable Diameter:	7.6-8.6mm
Conductor Insulation:	XLPE
Outer Insulation:	PVC
Min. Installation Temp.:	40°F(30°C)
Cold Lead:	2.5m
Hidden joint applications:	yes

230V	Longth (m)	Matte	A	ohms	
Catalog Number	Length (m)	Watts	Amps	OHIIIS	
CHS 130	3.3	130	0.6	406.9	
CHS 380	10	380	1.7	139.2	
CHS 735	20	735	3.2	72	
CHS 1400	35	1400	6.1	37.8	
CHS 2200	55	2200	9.6	24.1	
CHS 3500	85	3500	15.3	15.1	



#### **Approvals**

EHC **(€** 

# **RS-MAT**

### RS-MAT(Rubber Snow Melting Mat) Residential and Commercial



The heated snow melting mat allows you to melt away snow automatically at a rate of 2" per hour to create a safe and dry walkways and stairs. The pattern on mat not only supply a unique desirable look but also creates tread to prevent people from slipping.

- Eliminate snow & ice accumulation
- Portable
- Safe and clean

- Flexible installation
- Durability
- 2-year limited warranty

The Snow-Melting Walkway Mat and Stair Mat can be used independently or interconnected with one another to create a continuous system of snow melting mats, and the mats are designed to be left outside for whole cold winter.

#### **Technical Data**

Voltage:	230 V/120V
Output:	80 —1000W
Material:	SBR rubber
Mat size:	Length: max80"; Width: max40"
Mat thickness	0.27"
Snow melt rate	1.5-2.5" per hour
Surface working temp.:	≤70°C (Specific temperature changes with working environment)
Protection rating:	IP rating:IP68;
Cold lead:	H07RN-F 3G1.5mm², 15AWG or else
Hidden joint applications:	yes

Sheets

Content

# **Specifications**



#### Ordering information for Walkways

Model	Size	Volt	Watts	Amps	Weight	Maximum number of connections
RS Mat 1	20"*60"	120 V	350W	2.92A	8.2 KG	5
RS Mat 2	20"*60"	230V	350W	1.52A	8.2 KG	10
MAX	40"*80"	120/230	450W/m <sup>2</sup>			

Custom output Mats are available within the declared value.

Each grouping of residential mats requires one Power Unit (up to 16Amps).

#### Ordering information for Outdoor Stair



Model	Size	Volt	Watts	Amps	Weight	Maximum number of connections
RS Mat 1	10"*30"	120 V	87W	0.73A	2.0KG	21
RS Mat 2	10"*30"	230V	87W	0.38A	2.0KG	41
MAX	15"*60"	120/230	450W/m <sup>2</sup>			

Custom output Mats are available within the declared value.

Each grouping of residential mats requires one Power Unit (up to 16Amps).

#### Ordering information for Entrance

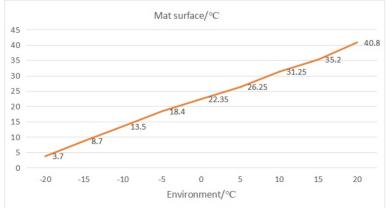


Model	Size	Volt	Watts	Amps	Weight	Maximum number of connections
RS Mat 1	24"*36"	120 V	250W	2.08A	4.3KG	1
RS Mat 2	24"*36"	230V	250W	1.09A	4.3KG	1
MAX	40"*80"	120/230	450W/m <sup>2</sup>			

Custom output Mats are available within the declared value.

Each grouping of residential mats requires one Power Unit (up to 16Amps).

## Surface temperature rise curve



Laboratory equipment: High and low temperature test box, Thermocouple thermometers;

Test voltage: 120V

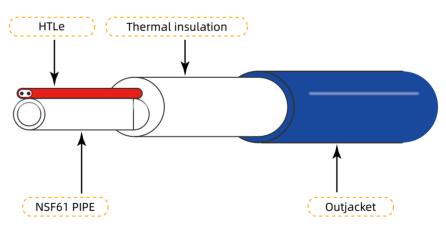
# **Heated Hose Product Technical Parameters**





- Antifreeze pipe: inner tube diameter 16mm, Outer diameter 30-34mm (customizable size), the color of outer jacket is blue, length 3.8-23m (customizable length)
- Preset pipe connection joint: Customized according to the needs of different countries or regions
- Conversion joints: Customized according to the needs of different countries or regions
- Power cord and plug: European standard plug H07RN-F 3G1.5, other types can be selected according to requirements

## Antifreeze pipe



- NSF61pipe: inner tube diameter 16mm, it is made of NSF61 drinking water certified PVC raw material, The maximum bursting pressure of the inner tube is 3.0MPA and the maximum recommended long-term service pressure can be maintained at 1.0MPA.
- Thermal insulation: Prefabricated glass fiber insulation layer with moisture-proof, thermal insulation, reinforcement and flame retardant characteristics.
- Outer jacket layer: The environmental protection type 70°C soft scratch resistant PVC jacket material is used for the outer layer, which meets Rohs and Reach environmental protection requirements and minimum -30°Cenvironment use requirements(outer jacket material use environment can be configured as low as -50°C).

## **Water connection**

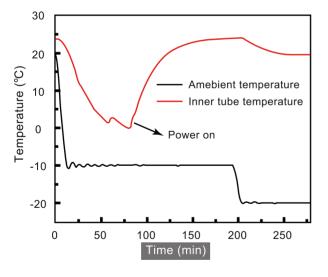
The connection joints can be preset according to the national or regional water pipe joint standard requirements, and the corresponding size adapter joints can be provided to meet the use requirements of various occasions.

## **Electrical characteristics table**

The electrical characteristics of the products to be supplied are as follows

Model	Size	Voltage V	Power W	Weight KG
Heated hose-3.8	3.8m	230	72	4.7
Heated hose-7.8	7.8m	230	150	7.9
Heated hose-15.4	15.4m	230	300	13.1
Heated hose-23	23m	230	450	20.1

## **Temperature-time curve**



From the temperature-time curve, it can be seen that this Heated hose product has excellent anti freezing capabilities in the environmental temperature of -20°C!

## **Product application display**

## Agriculture



The heated hose is NSF-61 certified, drinking water safe, and will not make your water taste like plastic or leach toxic chemicals into it. It is suitable for a wide range of applications, including RVs, livestock, agriculture, kennels, and other commercial and residential applications.

Livestock



Car care



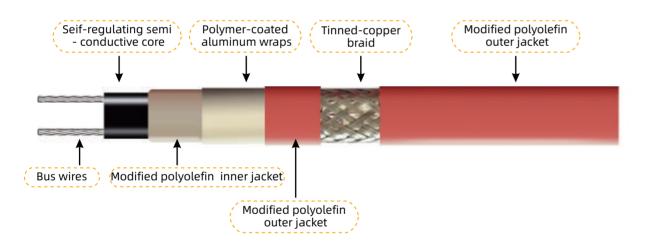
**RVing** 



# **HWTM** Self-Regulating Trace Heating Cable



- ♦ Low operating cost, the HWTM system continuously maintains hot water temperature at every point along the supply pipe.
- ♦ The self-regulating effect allows the cable to be overlapped without creating hot spots or burnout.
- Maintain hot water at desired temperature.
- ♦ Jiahong provides full range of controls and accessories.
- ♦ HWTM systems eliminate the need for designing complex recirculation systems, with their pumps, piping net-works, and complicated flow balancing.



# **Description**

HWTM self-regulating trace heating cables are installed on hot water supply pipes underneath standard pipe insulation. The heating cable adjusts its power output to compensate for variations in water temperature and ambient temperature. It replaces supply-pipe heating loses at the point where the heat loss occurs, thereby providing continuous, energy-efficient, hot water temperature maintains and eliminating the need for a recirculation system.

	HWTM-Y	HWTM-O	HWTM-R
Breaker size	230V	230V	230V
13A	110m	75m	65m
16A	140m	100m	80m
20A	180m	130m	100m

## **Specifications**

MODEL	HWTM-Y	HWTM-O	HWTM-R
Jacket color	Yellow	Orange	Red
Bus wires	16AWG	16AWG	16AWG
Maintance temperature	40℃ to 50℃	40℃ to 50℃	40℃ to 60℃
Max. exposure temperature	85°C	85°C	85°C
Nominal power output	7W/m at 45°C	9W/m at 55°C	12W/m at 70°C
Minimum bend radius	12mm	12mm	12mm
Supply voltage	208~277V	208~277V	208~277V





## **Approvals**







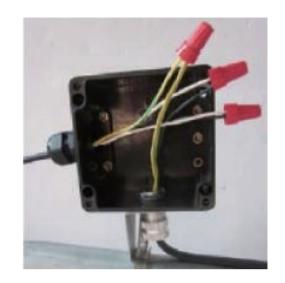


# JSR00 plug-in power connection kit

# Description

The JSR00 plug-in power connection kit is suitable for use only with the HTR, HTLe series heating cables. The kit provides material for one power connection.

The HTR-C,HTLe-C series heating cables are designed for water pipe freeze protection only. The HTR-CR, HTLe-CR series cables can be used for pipe freeze protection and/or roof and gutter de-icing.



## **Assembly Tools Needed**

Utility knife, wire cutter, needle-nose pliers, adjustable wrench, pen, screw-iver, heat gun, and measuring tape.



# **Other Materials Requird**

- Certified junction box appropriate for the site.
- JSR03 tape for pipe applications; JSR13/JSR14 roof clips and/or JSR15 downspout hangers for roof and gutter de-icing.





## **General Safety Information**

Read and understand all instructions in this manual and the following installation instructions and Safety

Warnings. Electrical cables, if not installed correctly or are damaged, can present a fire, shock, and arcing hazard.

- 1) Installation must be in compliance with National Electrical Codes(NEC).
- 2) Use 30-mA ground fault protection on each heating cable branch circuit for maximum protection.
- 3) The black heating-cable core is conductive and can short.It must be properly insulated and kept dry.
- 4) The conductive layer of this heating cable device must have a suitable grounding/earthing terminal.
- 5) Installer should apply the nameplate label to surface of the junction box.
- 6) Keep components and ends of heating cable dry before installation.
- 7) Do not break braid or bus wire strands when scoring the jacket or core.Damaged buswires can overheat or short.
- 8) Keep bus wires separated. Bus wires will short if they touch each other.
- 9) Replace damaged parts. Heat-damaged components can short.
- 10) Use heat gun or torch with a sof, yellow, low-heat flame, not a blue flame. Keep the flame moving to prevent overheating or blistering the heat-shrinkable.
- 11) Do not heat other components.
- 12) Use only fire-resistant insulaton material such as fiberglass wrap.
- 13) De-energize all circuits before installaton or service.
- 14) The heating cable should not be embedded in insulation or roofing material.
- 15) Do not twist cable during installaton.
- 16) Save all instructons for future reference.

#### Kit Items

	Kit Contents				
Item	Qty	Description			
А	1	Black cloth tapes(6" longx1" width)			
В	2	Clamp ties			
С	1	Black heat-shrinkable tube(8" longx3/4" dia)			
D	1	Black heat-shrinkable tube(5" longx3/4" dia)			
E	1	Uninsulated braid crimp			
F	2	Insulated bus wire crimps			
G	2	Black heat-shrinkable tube(1" longx1/8" dia)			
Н	1	Black heat-shrinkable tube(1" longx1/2" dia)			
I	1	Black heat-shrinkable tube(1-1/2" longx1/3" dia)			
J	2	Mastic strips			
К	2	Warning labels for pipe-trace application			
L	2	De-icing and snow melting equipment labels			
М	1	Plug-in pround-fault equipment protection device			

#### Warning

These component are electrical devices. They must be installed correctly to ensure proper operation and to prevent shock or fire. Carefully follow all of the installation instructions and read these important warning.

- To minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed, and to comply with the requirements of National electric codes, Ground-fault equipment protection must be used on each heating cable branch circuit. Arcing may be stopped by conventional circuit protection.
- Component approvals and performance are based on the use of specified parts only.Do
  not substitute parts or use vinyl electrical tape.
   The black heating-cable core is conductive and can short.It must be properly insulated and
  kept dry.
- The heating cable should not be embedded in the thermal insulation.

  The cable should not be twisted during installation.
- Keep components and heating cable ends dry before and during installation.
- Damaged bus wires can overheat or short.Do not break braid or bus wire strands when scoring the jacket or core.
- Bus wire will short if they contact each other. Keep bus wires separated.
- Heat-damaged components can short. Use a heat gun or a torch with a soft, yellow, low-heat flame, not a blue focused flame. Keep the flame moving to avoid overheating, blistering, or charring the heat-shrinkable tubes. Avoid heating other components.
- Replace any damaged parts.
- Use only fire-resistant insulation materials such as fiberglass wrap.
- Leave these installation instructions with the user for future reference.
- De-energize all power circuits before installation or servicing.
- The conductive layer of this heating device must be connected to a suitable grounding/earthing terminal.

#### **CAUTION**

Charring or buring the heat-shrinkable tubes in this kit will produce fumes that may cause eye, skin, nose, and throat irritation.

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## JSR08 plug-in, ground-fault-protected power connection kit

### **Description**

The JSR08 is a plug-in, ground-fault-protected power connection kit is suitable for use with 120V HTR self-regulating trace cables. This kit ensures compliance with NEC and CEC requirement for ground-fault protection of equipment.It does not protect people against the hazards of shock. The kit includes material for one power connection.HTR(All) heating cable are designed for water-pipe freeze protection applications.

Only the HTR-CR heating cable can be used for both pipe freeze protection and roof and gutter de-icing applications.



### **Tools Required**

(Crimp tools LY2026-9 "(6127) and LY2026-9" (6116), Utility Knife, Needle, Nose Pliers, Scissors, Cutter, Heat Gun)

## **Additional Materials Required**

- Grounded, UL Listed 15-amp 120-volt receptacle(receptacle must be approved for wet locations if exposed to weather)
- · Additional cable ties may be required for roof and gutter applications.
- Your application may require additional accessories; for example, JSR03 application tape for pipe application; JSR13/JSR14 roof clips and/or JSR15 downspout hangers for roof and gutter deicing applications.



# JSR10

## JSR10 Splice and Tee Kit

## **Description**

The JSR10 Splice and Tee Kit is suitable for use with HTR serials self-regulating heating cables to make splice, tee and end seal connections. The kit contains material for one splice and one end seal, or one tee connection and one end seal. This kit does not provide a power connection: use an JSR00 or JSR08 power connection kit for a complete installation.



Use the JSR10 kit with the following heating cables: HTR-C and HTR-CR heating cable. All are designed for pipe freeze protection in dry lacation, HTR-CR cables are designed for both wet and dry areas, as all as for roof and gutter deicing. The cable type is printed on the outer jacket of the cable.



Scissors, Flat nose pliers (KNIPEX 2001200), Nssdle Nose Pliers, Utility Knife, Panduit crimp tools CT100-A, Cutters, Heat Gun(2000W, Temperature Range 90-600°C(194-1112°F), air flow 300/500L/min)





#### Kit Items

	Kit Contents				
Item	Qty	Description			
А	1	Clamp tie			
В	1	Black cloth tape(6" long)			
С	1	Heat-shrinkable tube(8" long,1" dia)			
D	3	Cable ties			
E	5	Mastic strips(1-1/2" long,1" width)			
F	3	Heat-shrinkable tube(1" long,1/2" dia)			
G	6	Heat-shrinkable tube(1" long,1/8" dia)			
Н	2	Heat-shrinkable cap			
I	2	Insulated bus wire crimps			
J	1	Heat-shrinkable tube for ground			
K	1	Uninsulated braid crimp			

## **Installation Support**

These component are electrical devices. They must be installed correctly to ensure proper operation and to prevent shock or fire. Carefully follow all of the installation instructions and read these important warning.

- To minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed, and to comply with the requirements of National electric codes, Ground-fault equipment protection must be used on each heating cable branch circuit. Arcing may be stopped by conventional circuit protection.
- Bus wires will short if they concact each other. Keep bus wire separated.
- Keep ends of heating cable and kit components dry before and during installation.
- The black heating-cable core is conductive and can short. It must be properly insulated and kept dry.
- Component approvals and performance are based on the use of specified parts only.Do not substitute parts or use vinyl electrical tape.
- Leave these installation instructions with the user for future reference.
- The heating cable should not be embedded in the thermal insulation.
- The cable should not be twisted during installation.
- De-energize all power circuits before installation or servicing.
- The conductive layer of this heating device must be connected to a suitable grounding/earthing terminal

#### CAUTION

Charring or buring the heat-shrinkable tubes in this kit will produce fumes that may cause eye, skin, nose, and throat irritation.



### **JSR12 End Seal Kit**

installing or servicing heating cable and accessories.

A qualified person must perform installation and service of heating cable and accessories. Heating cable must be effectively grounded in accordance with the National Electrical Code. Failure to comply can result in personal injury or property damage.



#### Kit Items

Kit Contents				
Item	Qty	Description		
А	1	Heat shrink Tube(5" longx3/4" dia)		
В	1	Woven Braid Sleeving(4" longx1/2dia)		
С	1	Heat shrink Cap(1/2" dia)		

#### Note

- All electrical wiring, including GFCI(Ground Fault Circuit Interrupters), must be done according to National Electrical or local codes by a qualified person.
- Article 426 of ANSI/NFPA 70 of National Electrical Code(NECSection 62 of CAN/CSA-C22.1,Canadian Electrical Code,Part 1(CEC)governs the installation of this heat systems.
- JSR12 End Seal Kit is suitable for use with HTR heating cables.
- Keep ends of heating devices and kit components dry before and during installation.
- 1) Score the outer jacket2" from the end of the cable.Romove the jacket to expose the braid.

CAUTION: When removing the outer jacket, be careful not to damage the braid or the base cable insulation.



2) Push the braid back, and cut off the end 3/4" of the base cable. WARNING: ELECTRIC SHOCK HAZARD. To prevent short circuits, do not connect the bus wires together. Keep braid out of heat shrink cap.



3) Slide the heat shrink cap over the end of the cable. Apply heat evenly until it shrinks around the cable.



4) Pull the pushed-back braid over the sealed end cap and twist the braid end together.



5) Slide the 4" woven braid sleeving over the end of the cable, allowing at least 1/2" to extend past the end of the cable.



6) Slide the 5" heat shrink tubing over the woven braid piece, allowing 1/2" to extend past the end of the woven sleeving.



7) Apply heat evenly to the heat shrink tube unit it shrinks around the cable.



8. While the shrink tubing is still hot, gently squeeze the end of the shrink tube with pliers and hold until cool. The end must remain visibly sealed when the pliers are removed.



If the tube does not remain sealed, then repeat steps 7 and 8.

# JSR13 / JSR14 / JSR15

## JSR13/JSR14 Roof Clip JSR15 Hanger Bracket

## Description

The JSR13 and JSR14 Roof Clip Kit and the JSR15 Hanger Bracket Kit are suitable for use with HTR heating cables.Do not use other hardware or techniques which may damage the heating cable and cause electrical hazard,risk of fire or poor performance.



## JSR13/JSR14

The JSR13 and JSR14 roof clips are used to secure HTR heating cables to shingle and metal seam roofs and gutters. For applications where nails and screws will be used to install clips, go to page 2. For applications where adhesive will be used to install clips, go to page 3. The JSR13 is a bag of 10 clips and the JSR14 is a box of 50 clips.



#### JSR15

The JSR15 hanger bracket is used to provide mechanical protection to the HTR heating cables as it goes over sharp edges and to hold the heating cable in place at the top of downspouts. Refer to page 4 for instruction on how to install the JSR15 hanger bracket.

Tools Required (installed per NFPA70, National Electrical Code(NEC), Artice 426) -screwer -pliers -caulking gun Recommended Adhesives for Metal Roofs

- SpeedBonder®H3300(Methacrylate Adhesive)
- SpeedBonder H4800(Methacrylate Adhesive)
- Plexus MA310(Methacrylate Adhesive)
- Plexus MA300(Methacrylate Adhesive)
- GE®Grey RTV 167 Adhesive(Neutral-cure Silicone Adhesive)

Anti-freezing of pipes

#### **Kit Items**

JSR13 Contents					
Item	Qty	Description			
Α	10	Roof Clips			
	JSR14 Contents				
Item	Qty	Description			
А	50	Roof Clips			
JSR15 Contents					
Item	Qty	Description			
В	1	Hanger bracket			

## Warning

- Roof Clips and Hanger Bracket must be installed properly to ensure proper operation and to prevent the risk of electrical hazard or fire. Follow all design, installation, assembly, and test instructions carefully.
- To minimize the damager of fire from sustained electrical arcing if the heating cable is damager or improperly installed, and to comply with the requirements of national electrical codes, ground-fault equipment protection.

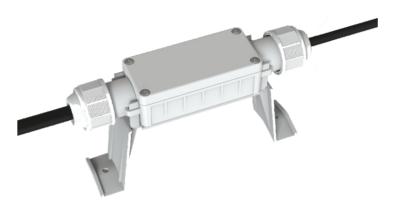
# **EasyLink**

## Description

The EasyLink system is a simple, fast and reliable connection device developed exclusively for self-regulating Trace heating cables. The easy-to-install EasyLingk system reduces installation time, lowering the total installed cost of the Trace heating cable system.

#### Feature

- No need for special tools, Intuitive installation
- Three-step installation

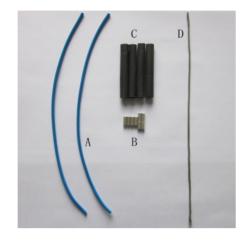


EasyLink-P					
Name	Power Connector				
Description	For the connection between power cable and heating cable				
EasyLink-S					
Name	Splice Connector				
Description	Description For the splice connection between two heating cables				
	EasyLink-LE				
Name End Connector with light					
Description For end connection of heating cable with light indicator					

# Floor Heating Cable Repair kit

## **Description**

The repair kit is for repairing heating cable that is damaged during installation of the heating cable/mat. The kit includes jumper wires to bridge the heating element after the damaged section is removed. The kit contents are sufficient to repair one damaged section up to 5 inches long. If more than 5 inches of cable has been damaged, the mat must be replaced.



## **Tools Required**

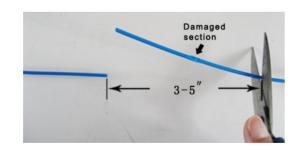
- Wire Strippers 16-26 AWG
- Gloves
- Scissors

- Crimp tool
- Heat gun
- Multimeter (capable of 200K ohms)

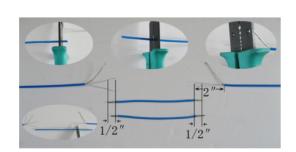
### **Kit Contents**

Item	Qty	Description
Α	2	Jumper wires (blue)
В	6	connectors
С	4	Heat-shrinkable tubing
D	1	Ground wire (non-insulated)

1 Remove at least 3-5 inches of heating cable including the damaged section leaving two protruding ends of heating cable.



2 Using the wire strippers carefully score the outer jackets and insulations.



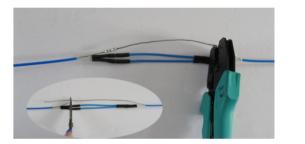
3 Using the crimp tool and connectors carefully connect the heating cables to the jumper wires and don't forget slide the heat-shrinkable tubes onto each jumper wire.



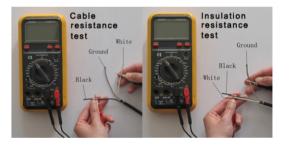
4 Center the 4 black heat-shrinkable tubes over the connectors and using the heat gun shrink in place.



5 Cut ground jumper wire to length, and using the crimp tool and connectors carefully connect the ground wires to the jumper wire.



6 Test the heating cable resistance and compare the reading to the cable specified. Set your multimeter to the 200K ohm range and test the insulation resistance, make sure the meter reads "Open" or "OL".



# **SX/HX Repair Kit**

## Description

The repair kit is for repairing heating cable that is damaged during installation of the heating cable/mat. The kit includes jumper wires to bridge the heating element after the damaged section is removed.

## **Tools Required**

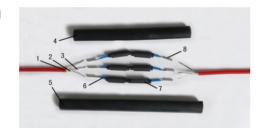
- Wire Strippers 16-26 AWG
- Crimp tool
- Heat gun

Gloves

- Scissors
- Multimeter (capable of 200K ohms)

#### Procedure

- ① Remove 1.5" (38mm) of the plastic cable jacket, being careful not to cut or damage the metal braiding beneath. Always use the heat gun for help to remove the plastic jacket or insulation, heat them for a few seconds will make them easy to remove.
- ② Remove 1" (25mm) of the inner jacket, being careful not to cut or damage the plastic insulation.
- 3 Remove 0.3" (8mm) of the insulation. Pay special attention not to nick the heating element. Future failure is possible if the integrity of the heating element is compromised.
- 4&5 Put the two heat-shrink tubes over each side of the wire. Once your repair is complete, these tubes will seal the complete repair
- 6 Use 3-5" jumper wire in the kit, remove 0.3" (8mm) of the insulation from both side.





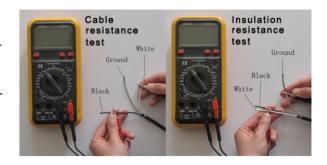




- 7) Place the inner heat-shrinks over the jumper wires to be used to seal the connectors once you connect the conductors.
- ® Using the crimp tool and connectors carefully connect the heating cables to the jumper wires. Pay special attention not to connect the heating element to the braid.
- in place.
- (10) Center the black heat-shrinkable tube (4) over the splice and using the heat gun shrink in place.
- ① Center the black heat-shrinkable tube ⑤ over the splice and using the heat gun shrink in place.

#### Test

Test the heating cable resistance and compare the reading to the cable specified. Set your multimeter to the 200K ohm range and test the insulation resistance, make sure the meter reads "Open" or "OL".



# IT IS NOT RECOMMENDED TO REPAIR A CABLE IN A CURVE. ADJUST/STRAIGHTEN OUT THE WIRE FIRST.

This cable is an electrical product and must be install in accordance to local and/or national electrical codes. Repair must be entrusted to a qualified professional where required by law.

# **Underfloor Screamer Monitor**

#### **OPERATING INSTRUCIONS**

The heating elements are tough, but they could be damaged on the jobsite. We recommend the screamer to monitor your mats duringevery installation step. The screamer will immediately wan you in the event of damage. If the alarm sounds, stop work and check operations tep in the installation manual.

#### **PREPARATION**

1.Switch the unit to "ON". The alarm should sound and the red lightshould flash when there are no connections to a mat or cable. If these things do not occur, open the back cover, inspect the battery connections or replace the 9v battery. See figure 1.

2.During normal use, the white light indicates that the screamer is monitoring the mat or cable for damage. Should the white light go out, open the back cover, replace the 9V battery before continuing work, See figure 1.

#### **OPERATION**

Make sure the mats and/or cables to be monitored are notconnected to a power source.

Connect the system leads at the beginning of the project to detectfaults.

See Figure 2.The screamer is designed to monitor the matsor cables individually. However, by making a temporary "series" connection of multiple mats or cables, it can monitor up to three (3) products at one time.

1.FOR A SINGLE MAT OR CABLE: Strip the insulation around thetip of the cold cable and separate the sheath ground wire.

Insert each lead wire of the cold cable into the red and black clips withthe ground wire inserted into the green alligator clip.



Figure 1



Figure 2



Figure 3

2.FOR UP TO THREE MATS OR CABLES: Connect brown lead wire(not the ground wire) from one mat or cable into the red clip.

Connect blue lead wire (not the ground wire)from a DIFFERENTmat or cable into the black clip. Now connect the remaining lead wires so the mats or cables are in a "series" with one another. Coverthe connections with insulation tape. If this not done properly, the screamer may not correctly monitor the mats or cables. Lastly, connect all the green ground wires from the matsor cables together to the green aligator clip. See Figure 3.

- 3.Set the switch to the "ON" position.
- 4.A white light indicates the screamer is operating.
- 5. Hang or place the screamer where it can be seen and heard duringheating product installation.
- 6.A red light and alarm indicate lead wires have come loose fromterminals or damage has occurred to the heating product.

Please note:for added protection, we recommend all mats betested with an Ohm's meter for more specific readings. and oncompletion of the floor finish with an insulation (Megger) tester set@500v. The insulation reading must be between infinity and 1MOhm.

#### **ALARM INSTRUCTIONS**

#### "X"indicates alarm

Leads	Short circuit	Open circui
L1,L2	N/A	X
G,L1	X	N/A
G,L2	X	N/A
G&L1,L2	X	N/A