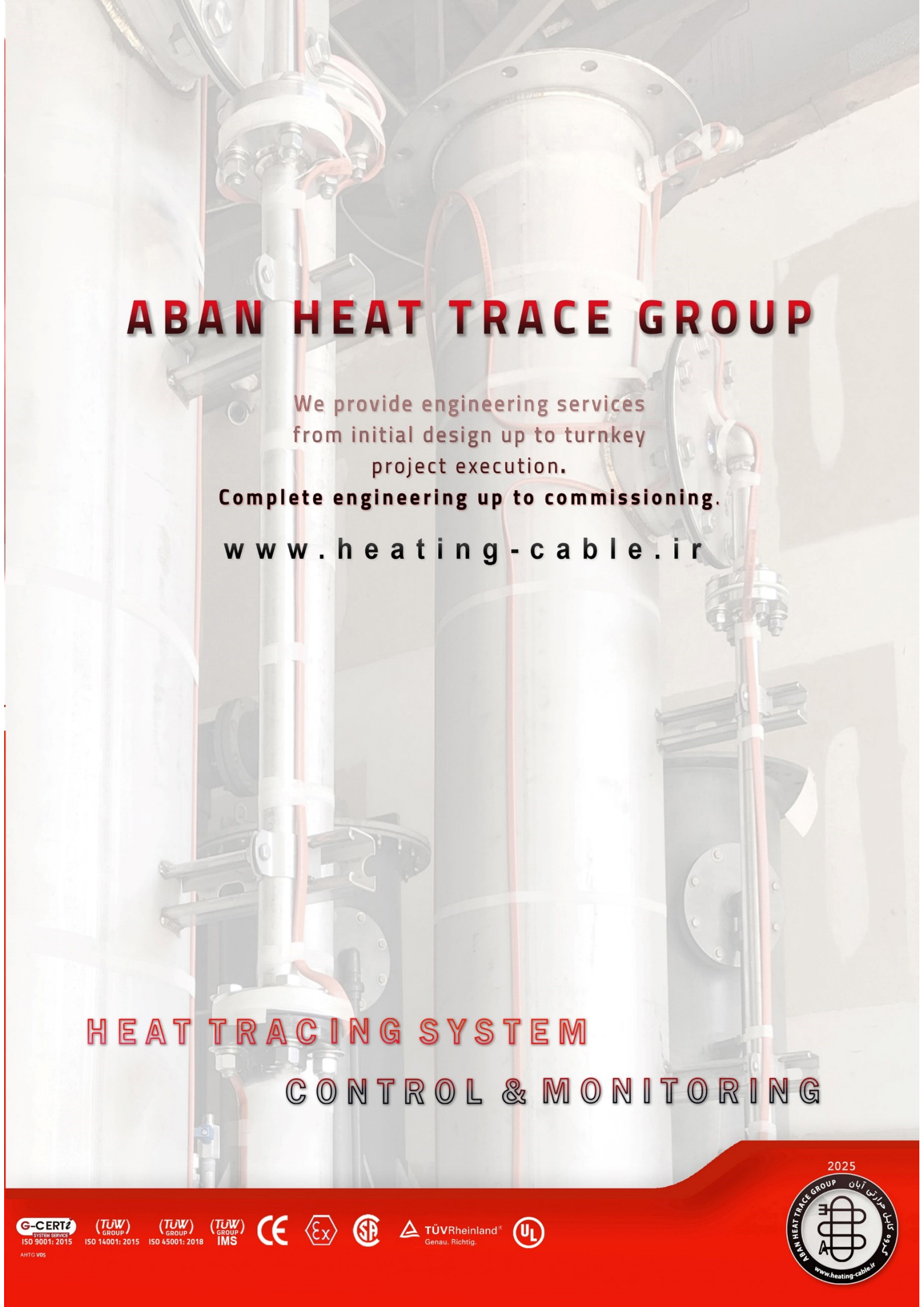


ABAN HEAT TRACE GROUP

We provide engineering services
from initial design up to turnkey
project execution.

Complete engineering up to commissioning.

www.heating-cable.ir

HEAT TRACING SYSTEM

CONTROL & MONITORING

2025

ISO 9001: 2015 ISO 14001: 2015 ISO 45001: 2018 IMS

AHTG V05

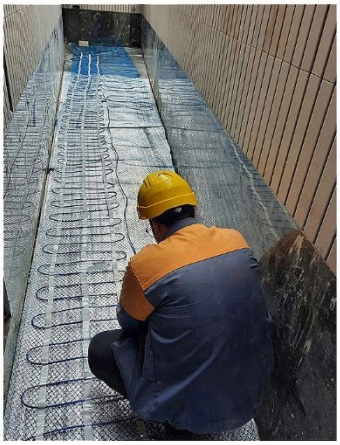
About us

ABAN HEAT TRACE GROUP is an esteem established company in Tehran-Iran with the core of high of expert and engineers of more than 20 years of experience in electrical heat trace projects.

AHTG Activities have been proceeded in mains below branches:

- Production of special heat tracing accessories for industrial and domestic application.
- System Design and Engineering of any heat trace project specially in Oil & gas, Petrochemical, Food and Metal industry.
- Installation & Commissioning of heat tracing system included heating cable, accessories and thermal insulation
- Training courses for experts that working in the projects and who that interested heat trace knowledge
- Supply the highest quality brands of heat tracing cable from the most famous European and American manufacturers.

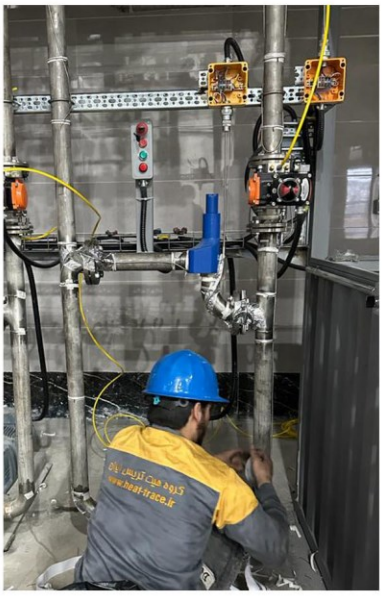
Base on valuable experience of the experts and engineers **AHTG** is ready to cooperate with the industrial and domestic sector regarding the heat tracing projects.

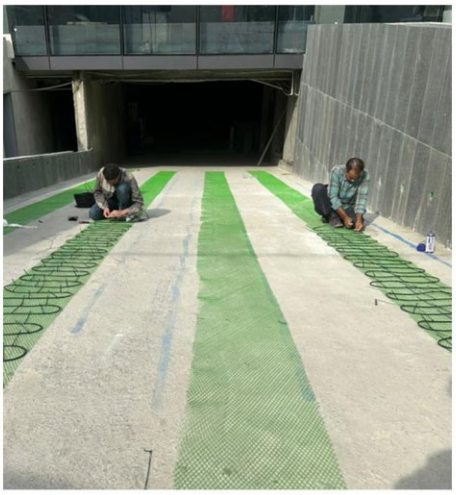


AHTG.CO
ABAN HEAT TRACE GROUP









Interated Management System

Refrence List

ABAN
HEAT TRACE GROUP
COMPANY

Company	Discipline	Doc Type	Serial
AHTG	SA	FR	021

Rev No:04 Class:0

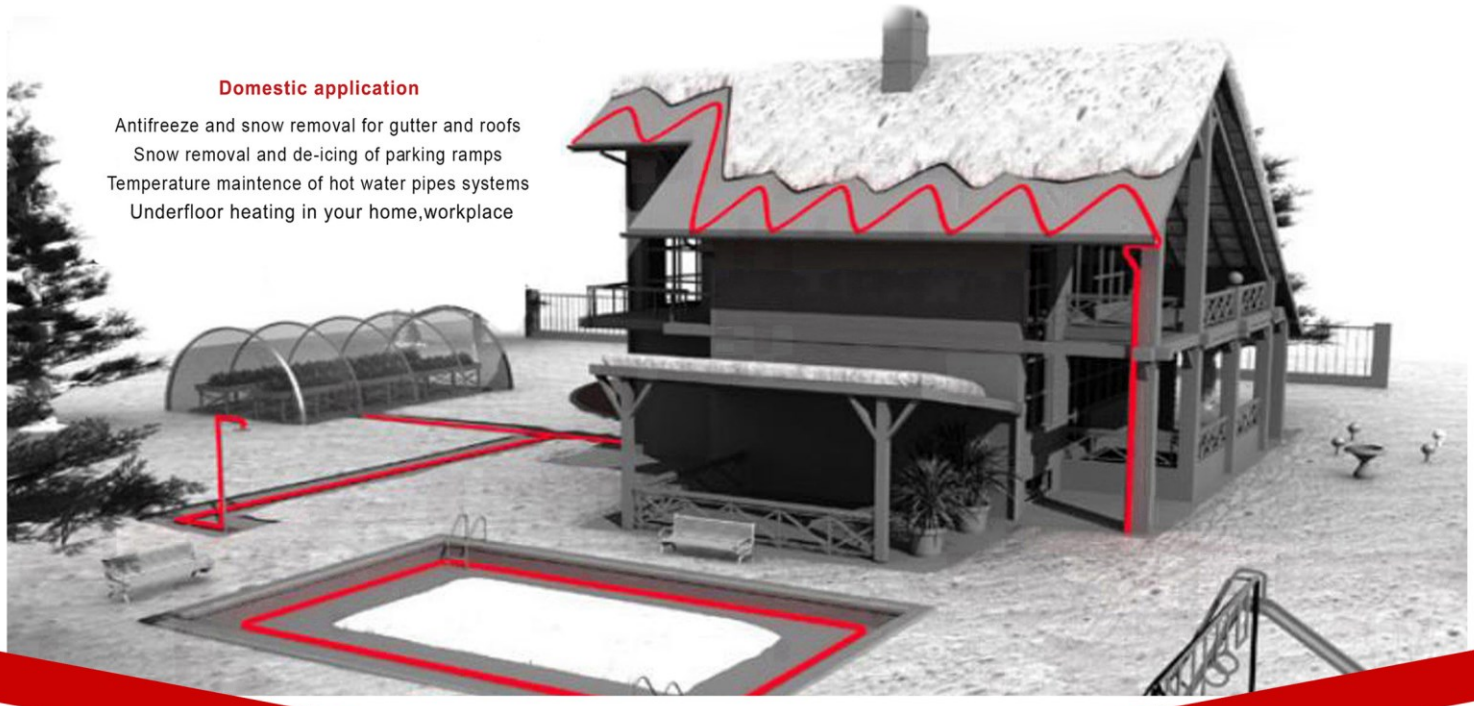
No	Owner of EHT Project	Date	Remark	
1	SPGC Company (The 3th refinery)	2025	P	Ongoing
2	Urmia Power Plant	2024	P	Ongoing
3	Iranian National Copper Company (SARCHESHME)	2024	P	Finished
4	Tarasht Power Plant	2024	EPC	Ongoing
5	Kavian Petrochemical	2024	P	Finished
6	Shirvan Power Plant	2024	EPC	Finished
7	SH.M.Montazeri Power Plant	2024	P	Finished
8	SPGC Company (The 4th refinery)	2023	P	Finished
9	SPGC Company (The 6th refinery)	2023	P	Finished
10	Semirom Refractory Mining Co	2023	P	Finished
11	Henkel Company (Qazvin Province)	2023	P	Finished
12	Ilam Petrochemical	2023	P	Finished
13	Sanandaj Gas Power Plant	2023	EP	Finished
14	Sabzevar Still Co	2022	EP	Finished
15	Iranian Central Oil Field Company (ICOFC)	2022	EPC	Finished
16	Shiva Food Industrial Complex	2022	EPC	Ongoing
17	Piramoon System Qeshm	2022	EP	Finished
18	Yazd Power Generation Plant	2022	EP	Ongoing
19	Khayam Power Generation Plant	2022	EP	Finished
20	Iranian National Copper Company (INCC)	2022	EP	Ongoing
21	AZMOON KAR CO	2022	EP	Finished
22	Bisotun Petrochemical	2022	P	Finished
23	Masjed soleyman Petrochemical	2022	P	Finished
24	Ilam Petrochemical	2022	P	Finished
25	Alborz Polour	2022	EP	Finished
26	Tabriz Petro Chemical Co	2022	EP	Ongoing
27	Metallurgy of Mashhad	2021	EP	Finished
28	MALAYER iron smelting	2021	EP	Finished
29	ZARAND STEEL CO	2021	EP	Finished
30	HOORSAN	2021	EP	Finished
31	ARTMAN POLYMER	2021	EP	Finished
32	PETRO ARIYA	2021	EP	Finished
33	Shiraz Petrochemical	2021	P	Finished
34	Pasargard Still Co	2020	EPC	Finished
35	TAM Irankhodro	2020	P	Finished
36	Mashiz Bardsir Steel Industries	2019	P	Finished
37	Tondgouyan Petrochemical	2019	EP	Finished
38	Tehran Metro	2010	P	Finished

Industrial

For industrial applications

Freeze protection and temperature maintenance of pipes.
Surface heat tracing of balloons and tanks.
Anti-condensation in hoppers.

Domestic



Domestic application

Antifreeze and snow removal for gutter and roofs
Snow removal and de-icing of parking ramps
Temperature maintence of hot water pipes systems
Underfloor heating in your home,workplace

INDEX

AHTG
ABAN HEAT TRACE GROUP

Industrial

Self-regulating heating cable

Low temperature type

AHTG 301
AHTG 401
AHTG 311

Medium temperature type

AHTG 411

High temperature type

AHTG 412
AHTG 413

Constant wattage heating cable

AHTG 106 Series connection constant wattage heating cables
AHTG 109 Self limited parallel constant wattage heating cables
AHTG 108 silicone constant wattage heating cables
AHTG 107 Flexible silicone constant wattage heating cables
AHTG Mineral Insulated constant wattage heating cables

Domestic

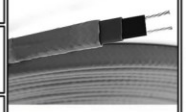
AHTG Home use product

Mat type

AHTG 108 Mat
AHTG 108.12, 108.18 Under floor heating cable
AHTG F- Mat
AHTG S- Mat
AHTG 114 Snow melting mat
AHTG 110 Constant wattage heating cable
AHTG 900 Series
AHTG Controller

Accessories

Self-Regulating heating cable

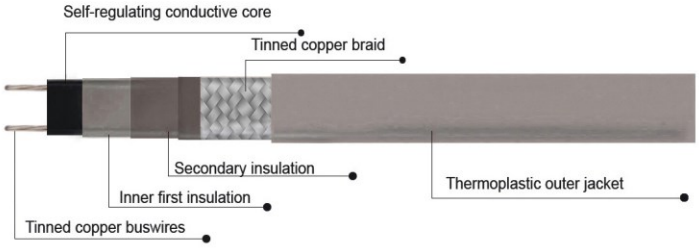
AHTG Code	Product Picture	Dimensions (mm)	Bus wire	Power (w/m)	Material	Maximum Maintain Temperature	Exposure Temperature	Minimum Installation Temperature	Maximum Usage Lenght (Based on 220V)
301- 25	 301-20	12.8*5.8	16 AWG	25	Bus wire: Tinned copper Conductor: PTC Insulation: Inner Sheild: tinned copper braid Jacket: Thermoplastic (5 Layer)	65C°	85C°	-40C°	151
301- 30				30					98
301- 40				40					72
311- 11		10.4*5.3	18 AWG	11	Bus wire: Tinned copper Conductor: PTC Insulation: Thermoplastic Sheild: tinned copper braid Jacket: Thermoplastic (5 Layer)	65C°	85C°	-40C°	145
311- 17				17					120
311- 23				23					100
401- 16	 401-20	10.7*4.5	16 AWG	16	Bus wire: Tinned copper Conductor: PTC Insulation: Inner Jacket: Thermoplastic (4 Layer)	65C°	85C°	-40C°	151
401- 30				30					98
401- 40				40					72
411- 35	 411.20	13.3*6.1	16 AWG	30	Bus wire: Tinned copper Conductor: PTC Insulation: Thermoplastic Sheild: tinned copper braid Jacket: fluoropolymer (5 Layer)	110C°	135C°	-40C°	100
411- 40				40					85
411- 60				60					70
412- 30		10.6*4.6	16 AWG	30	Bus wire: Tinned copper Conductor: PTC Insulation:fluoropolymer Sheild: tinned copper braid Jacket: fluoropolymer (5 Layer)	120C°	200C°	-40C°	130
412- 45				40					90
412- 60				60					70
413- 16	 413-49	10.6*4.6	16 AWG	16	Bus wire: Tinned copper Conductor: PTC Insulation:fluoropolymer Sheild: tinned copper braid Jacket: fluoropolymer (5 Layer)	150C°	250C°	-60C°	130
413- 33				33					90
413- 66				66					70

Self-regulating heating cable

AHTG 301

2 years warranty

AHTG
ABAN HEAT TRACE GROUP



Introduction

AHTG 301 Constructed of a semi-conductive heater matrix extruded between parallel bus wires, a self-regulating cable adjusts its output to independently respond to ambient temperatures all along its length. As temperature increases, the heater's resistance increases, which lowers the output wattage. Conversely, as the temperature decreases,the resistance decreases and the cable produces more heat. So thermostat is not necessary in some applications. It will never overheat or burnout even when overlapped. The cable can also be cut to any length. As the result, we got an energy efficient heating cable. This self-regulating heating cable is resistant to watery and inorganic chemicals and protected against abrasion and impact damage.

Technical Data

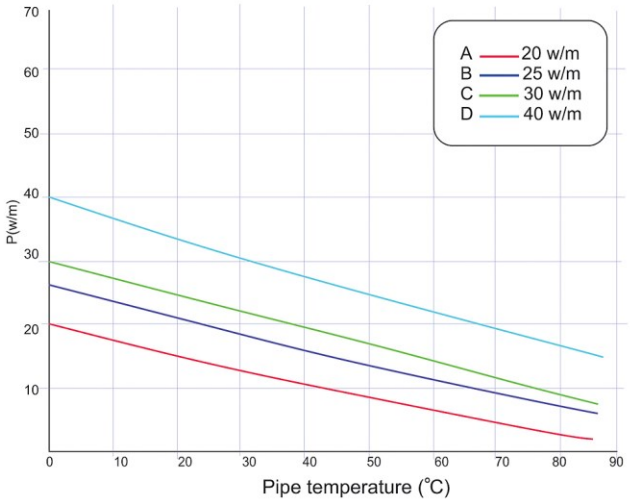
Output Wattage	16,20,30, 40 (w/m)
Maximum maintain temperature	65C°
Maximum exposure temperature	85C°
Minimum installation temperature	-40C°
Work voltage	110V-120V / 220-240V
Max resistance of braid	≤18.2 Ω /km
Bus wire gauge	16AWG
Approvals	CЄ,EAC,EACEX,ATEX

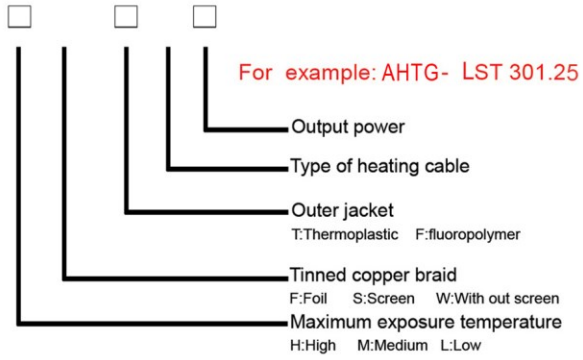
2 years warranty

Application

AHTG 301 Self-regulating heating cable is ideally used for process temperature maintenance and frost protection of regular diameter pipelines, tanks, valves, flanges,roof & gutter de-icing, snow melting and other applications of low temperature working conditions.

It is suitable for hazardous area, and cable with outer thermoplastic jacket can also be used in hazardous area. The cable with UV stabilized thermoplastic elastomer outer jacket is provided to cover the braid for wet applications and exposure to the sun.





Nominal power output @ +10C, 230 Vac		
Code	**Type**	**Value w/m**
A	**301.20**	**20**
B	**301.25**	**25**
C	**301.30**	**30**
D	**301.40**	**40**

Flame retardant thermoplastic outer jacket protects against certain inorganic chemical solutions, it also protects against abrasion and impact damage.

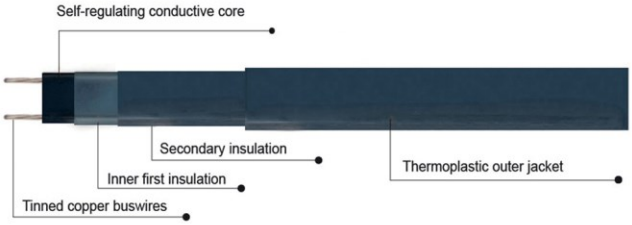
Part Number	Output power +10C @ w/m	Maximum Maintain Temprature (C)	Max lenght @+10C 16/30 A (m)	Max lenght @+ 0C 16/30 A (m)	Max lenght @-20C 16/30 A (m)	Dimension (mm)	weight (kg/100m)
AHTG 301.20	20	65	110/151	100/124	86/98	12.8*5.8	11.5
AHTG 301.25	25	65	89/118	75/94	63/80	12.8*5.8	11.5
AHTG 301.30	30	65	71/98	60/77	52/65	12.8*5.8	11.5
AHTG 301.40	40	65	62/72	52/60	45/53	12.8*5.8	11.5

Self-regulating heating cable

AHTG 401

2 years warranty

AHTG
ABAN HEAT TRACE GROUP



Introduction

AHTG 401 Constructed of a semi-conductive heater matrix extruded between parallel bus wires, a self-regulating cable adjusts its output to independently respond to ambient temperatures all along its length. As temperature increases, the heater's resistance increases,which lowers the output wattage. Conversely, as the temperature decreases,the resistance decreases and the cable produces more heat. So thermostat is not necessary in some applications. It will never overheat or burnout even when overlapped. The cable can also be cut to any length. As the result, we got an energy efficient heating cable.

This self-regulating heating cable is resistant to watery and inorganic chemicals and protected against abrasion and impact damage.

Technical Data

Output Wattage	16, 20, 30, 40 (w/m)
Maximum maintain temperature	65C°
Maximum exposure temperature	85C°
Minimum installation temperature	-40C°
Work voltage	110V-120V / 220-240V
Max resistance of braid	≤18.2 Ω /km
Bus wire gauge	16AWG
Approvals	CE

Self-Regulating heating cable

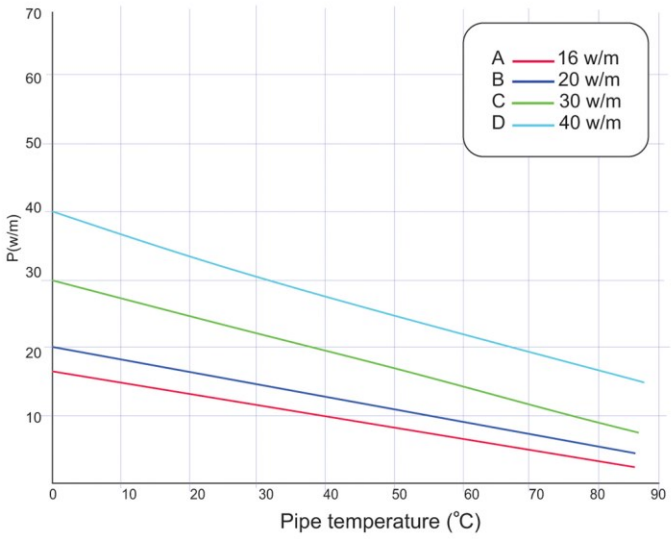
AHTG 401

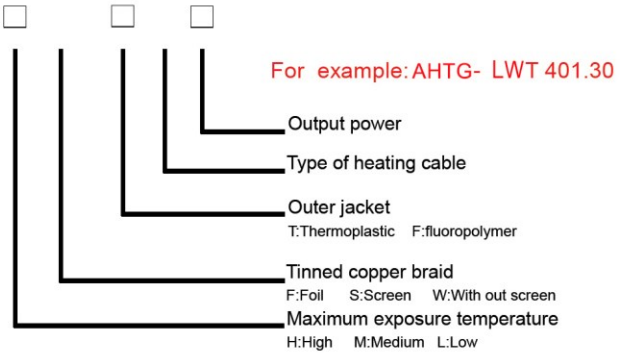
2 years warranty

Application

AHTG 401 Self-regulating heating cable is ideally used for process temperature maintenance and frost protection of regular diameter pipelines, tanks, valves, flanges, roof & gutter de-icing, snow melting and other applications of low temperature working conditions.

The cable with UV stabilized thermoplastic elastomer outer jacket is provided to cover the braid for wet applications and exposure to the sun.





Nominal power output @ +10C, 230 Vac		
Code	**Type**	**Value w/m**
A	**401.16**	**16**
B	**401.20**	**20**
C	**401.30**	**30**
D	**401.40**	**40**

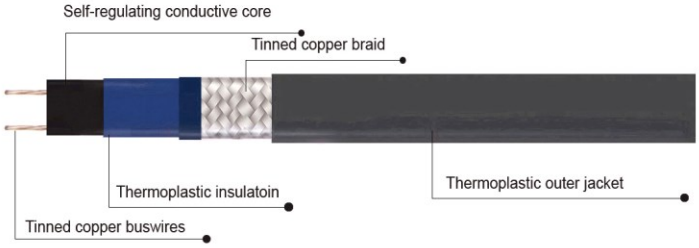
Part Number	Output power +10C @ w/m	Maximum Maintain Temprature (C)	Max lenght @+10C 16/30 A (m)	Max lenght @+ 0C 16/30 A (m)	Max lenght @-20C 16/30 A (m)	Dimension (mm)	weight (kg/100m)
AHTG 401.16	16	65	110/151	100/124	86/98	10.7*4.5	7.25
AHTG 401.20	20	65	89/118	75/94	63/80	10.7*4.5	7.25
AHTG 401.30	30	65	71/98	60/77	52/65	10.7*4.5	7.25
AHTG 401.40	40	65	62/72	52/60	45/53	10.7*4.5	7.25

Self-Regulating heating cable

AHTG 311

2 years warranty

AHTG
ABAN HEAT TRACE GROUP



Introduction

AHTG 311 as temperature increases, the heaters resistance increases, which lowers the output wattage. Conversely, as the temperature decreases, the resistance decreases and the cable produces more heat. so thermostat in not necessary in some applications.

It never over heat or burnout even when overlapped. the cable can also be cut to any lenght.as the result, we got an energy efficient heating cable. with optional outer jackets, the heating cable is resistant to watery and inorganic chemical and protected against abrasion and impacted damage. typical application is heat trace designs and applications.

Technical Data

Output Wattage	11, 15, 23, 31 (w/m)
Maximum maintain temperature	65C°
Maximum exposure temperature	85C°
Minimum installation temperature	-40C°
Work voltage	110V-120V / 220-240V
Max resistance of braid	≤18.2 Ω /km
Bus wire gauge	18AWG
Approvals	CЄ,EAC,EACEX,ATEX

Self-Regulating heating cable

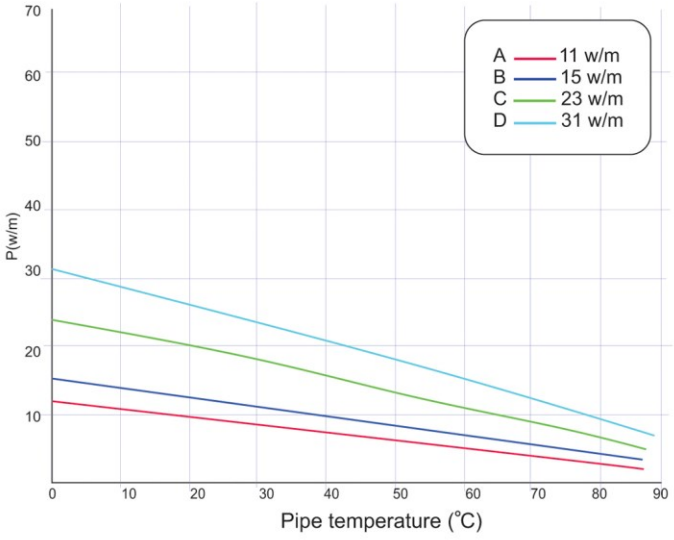
AHTG 311

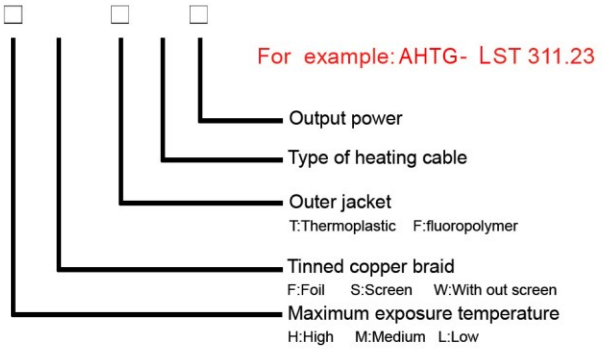
2 years warranty

Application

AHTG 311 Self-regulating heating cable is designed for commercial and residential metal and plastic pipe process temperature maintenance and frost protection of regular pipelines, tanks, valves, flanges, roof & gutter de-icing and other applications of low temperature working conditions. A UV stabilized ther moplastic elastomer outer jacket is provided to cover the braid for wet applications and exposure to the sun.

It is suitable for hazardous area, then cable with thermoplastic outer jacket can also be used in hazardous area and to the sun.





Nominal power output @ +10C, 230 Vac		
Code	**Type**	**Value w/m**
A	**311.11**	**11**
B	**311.15**	**15**
C	**311.23**	**23**
D	**311.31**	**31**

Flame retardant thermoplastic outer jacket protects against certain inorganic chemical solutions, it also protects against abrasion and impact damage.

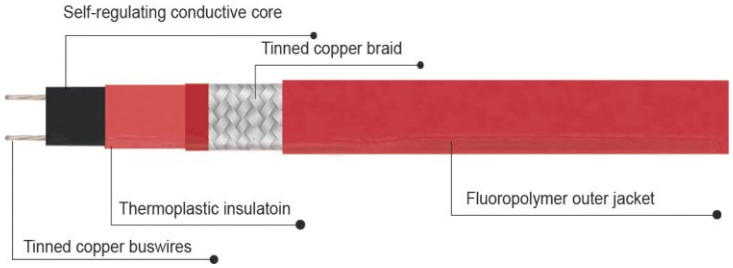
Part Number	Output power +10C @ w/m	Maximum Maintain Temprature (C)	Max lenght @+10C 16/30 A (m)	Max lenght @+ 0C 16/30 A (m)	Max lenght @-20C 16/30 A (m)	Dimension (mm)	weight (kg/100m)
AHTG 311.11	11	65	120/145	121/140	108/120	10.4*5.3	8.4
AHTG 311.15	15	65	117/118	109/120	95/115	10.4*5.3	8.4
AHTG 311.23	23	65	75/100	72/91	65/84	10.4*5.3	8.4
AHTG 311.31	31	65	51/65	45/61	40/55	10.4*5.3	8.4

Self-Regulating heating cable

AHTG 411

2 years warranty

AHTG
ABAN HEAT TRACE GROUP



Introduction

AHTG 411 is Middle Temperature Self-regulating Heating Cable,Constructed of a semi-conductive heater matrix extruded between parallel bus wires, a self-regulating cable adjusts its output to independently respond to ambient temperatures all along its length.

As temperature increases, the heater's resistance increases, which lowers the output wattage.

Conversely, as the temperature decreases, the resistance decreases and the cable produces more heat.

So thermostat is not necessary in some applications.

It will never overheat or burnout even when overlapped.

The cable can also be cut to any length. As the result, we got an energy efficient heating cable.

Technical Data

Output Wattage	20, 30, 40, 60 (w/m)
Maximum maintain temperature	110C°
Maximum exposure temperature	135C°
Minimum installation temperature	-40C°
Work voltage	110V-120V / 220-240V
Max resistance of braid	≤18.2 Ω /km
Bus wire gauge	16AWG
Approvals	CЄ ,EAC,EACEX,ATEX

Temperature classification T3

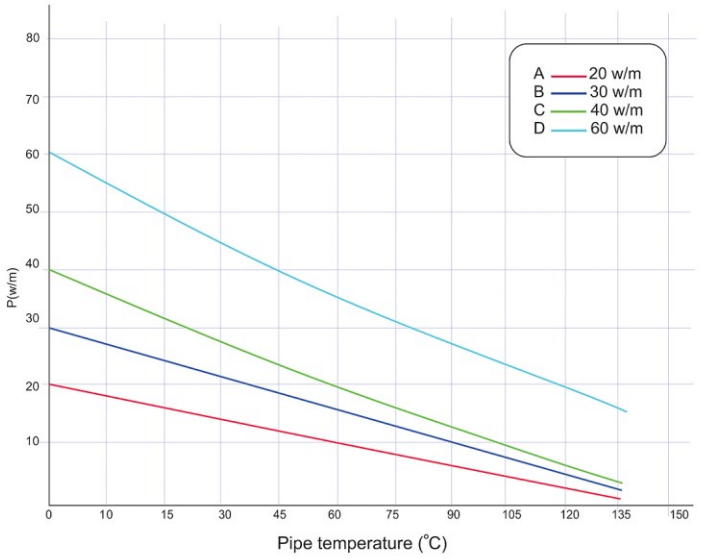
Self-Regulating heating cable

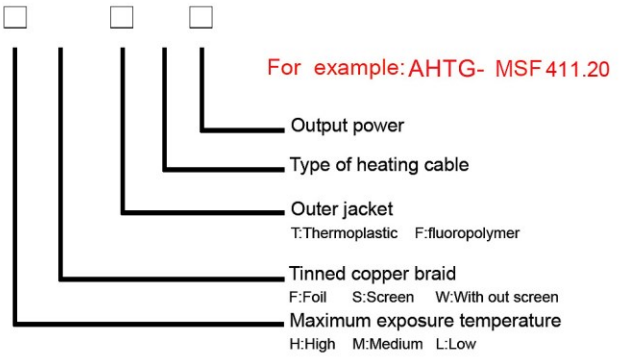
AHTG 411

2 years warranty

Application

AHTF 411 Self-regulating heating cable is ideally used for process temperature maintenance and frost protection of large diameter pipelines, tanks, valves, flanges, and other industrial applications of high heat loss issues. It is suitable for hazardous area, and cable with fluoropolymer outer jacket can also be used in hazardous area and corrosive area.





Nominal power output @ +10C, 230 Vac		
Code	**Type**	**Value w/m**
A	**411.20**	**20**
B	**411.30**	**30**
C	**411.40**	**40**
D	**411.60**	**60**

Fluoropolymer outer jacket is used for exposure to organic or corrosive working conditions or vapor may exist.

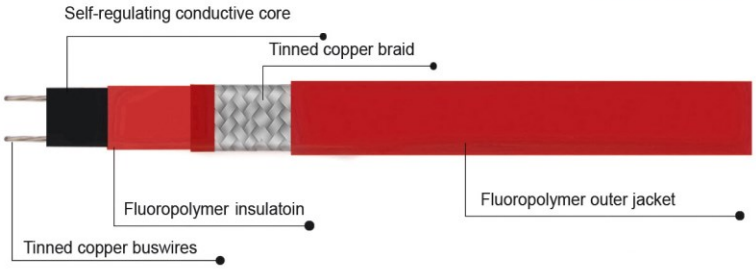
Part Number	Output power +10C @ w/m	Maximum Maintain Temprature (C)	Max lenght @+10C 16/30 A (m)	Max lenght @+ 0C 16/30 A (m)	Max lenght @-20C 16/30 A (m)	Dimension (mm)	weight (kg/100m)
AHTG 411.20	20	110	90/120	82/112	62/98	13.3*6.1	12.5
AHTG 411.30	30	110	75/100	65/90	45/60	13.3*6.1	12.5
AHTG 411.40	40	110	60/85	50/75	35/50	13.3*6.1	12.5
AHTG 411.60	60	110	50/70	40/60	30/45	13.3*6.1	12.5

Self-Regulating heating cable

AHTG 412

2 years warranty

AHTG
ABAN HEAT TRACE GROUP



Introduction

412 Series Self-Regulating Heating Cables provide the most variety in heat trace designs and applications. Constructed of a semi-conductive heater matrix extruded between parallel bus wires, a self-regulating cable adjusts its output to independently respond to ambient temperature all along its length.

As temperature increases, the heater's resistance increases , which lowers the output wattage.

Conversely, as the temperature decreases , the resistance decreases and the cable produces more heat.

So thermostat is not necessary in some applications. It will never overheat or burnout even when overlapped.

The cable can also be cut to any length . As the result, we got an energy efficient heating cable.

With optional outer jackets, the heating cable is resistant to watery and in organic chemicals and protect against abrasion and impacted damage

Technical Data

Output Wattage	20, 30, 40, 60 (w/m)
Maximum maintain temperature	120C°
Maximum exposure temperature	200C°
Minimum installation temperature	-40C°
Work voltage	220-240V
Max resistance of braid	≤18.2 Ω /km
Bus wire gauge	16AWG
Approvals	Exe IIC Gb T4 Ext lllC Db T4

Self-Regulating heating cable

AHTG 412

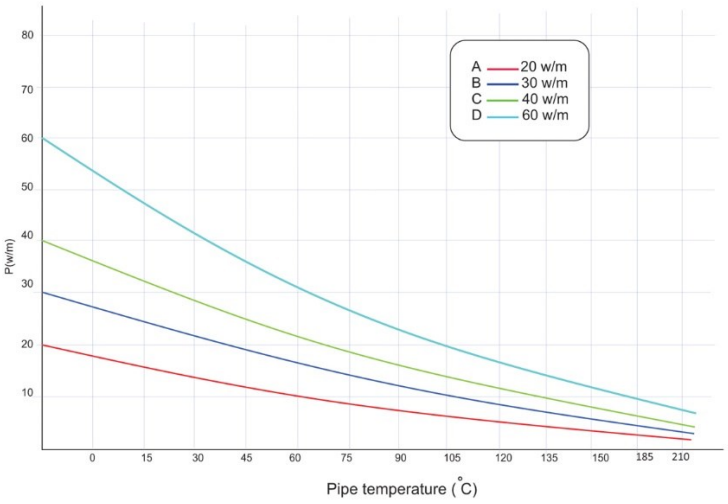
2 years warranty

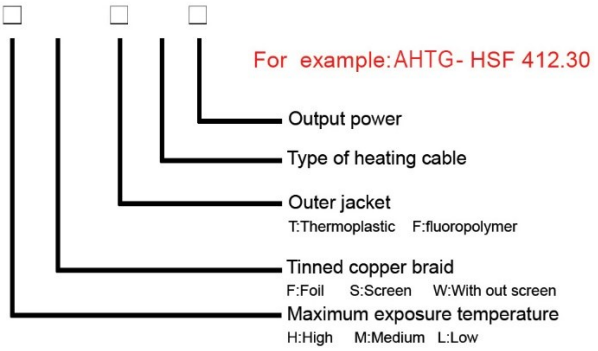
Application

AHTG 412 series self-regulating heating cables are suitable for: defrosting and temperature remaintenance of pipes tanks valves, flanges, roof melting and snow melting, and heating requests that reguire high power output.

Also suitable for: applications in explosion-proof and applications in explosion-proof and corrosive environments.

AHTG 412 series self-regulating heating cable can with stand the highest exposure temperature up to 215 °C (419 °F) and the highest maintain temperature can reach 125 °C(257 °F).





Nominal power output @ +10C, 230 Vac		
Code	**Type**	**Value w/m**
A	**412.20**	**20**
B	**412.30**	**30**
C	**412.40**	**40**
D	**412.60**	**60**

Part Number	Output power +10C @ w/m	Maximum Maintain Temprature (C)	Max lenght @+10C 16/30 A (m)	Max lenght @+ 0C 16/30 A (m)	Max lenght @-20C 16/30 A (m)	Dimension (mm)	weight (kg/100m)
AHTG 412.20	20	120	85/114/130	69/100/114	62/88/103	10.6*4.6	11-12 Kg
AHTG 412.30	30	120	80/91/102	57/89/110	53/80/100	10.6*4.6	11-12 Kg
AHTG 412.40	40	120	70/82/90	49/75/82	44/67/73	10.6*4.6	11-12 Kg
AHTG 412.60	60	120	50/64/70	38/58/64	35/53/59	10.6*4.6	11-12 Kg

Self-Regulating heating cable

AHTG 413

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

① Bus wires [Nickel-plated Copper]
② Conductive Core[Heating Matrix]
③ Inner Jacket[Fluoropolymer]
④ Metallic Braid[Tinned Copper]
⑤ Outer Jacket[CT; Fluoropolymer]

AHTG 413 Self-Regulating Heating Cable is designed for freeze protection and high process temperature maintenance of metal and non-metal pipes and vessels and equipment where steam cleaning is required. AHTG 413 heating cable system is certified for ordinary and hazardous areas with maximum maintain temperature of 300°F(150°C) and intermittent exposure temperature of 482°F(250°C).

Technical Data

Output Wattage	16, 33, 49, 60 (w/m)
Maximum maintain temperature	150C°
Maximum exposure temperature	250C°
Minimum installation temperature	-60C°
Work voltage	220-240V
Max resistance of braid	≤18.2 Ω /km
Bus wire gauge	16AWG

Approvals :

II 2 G Ex 60079-30-1 IICT3...T2D Gb, II 2 D Ex 60079-30-1 IIIC T200 °C...T215 °C Db

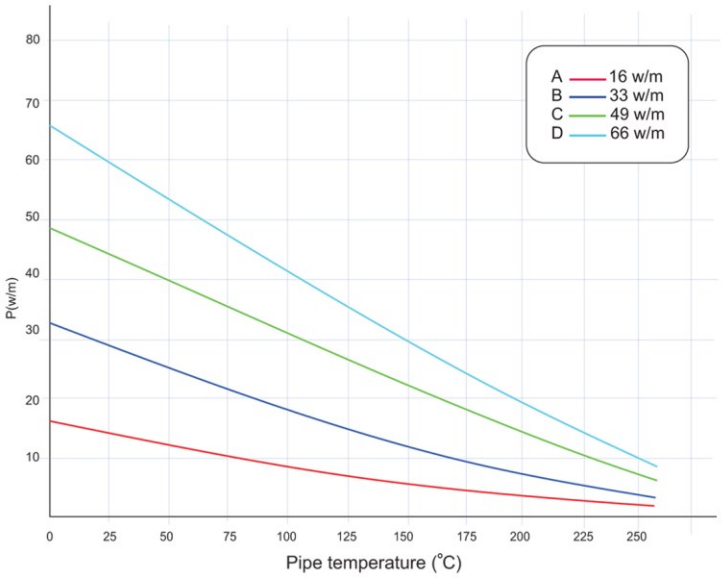
IECEx, Ex eb IIC T3...T2 Gb, IP 66

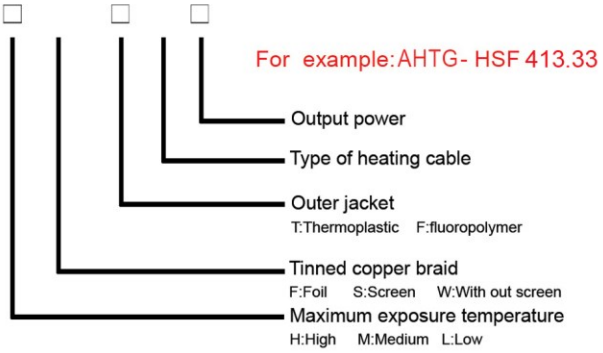
Min. Bending Radius 1.2” @70°F(30mm @20°C), 2.0” @-40°F(50mm @-40°C)

Self-Regulating heating cable

AHTG 413

2 years warranty





Nominal power output @ +10C, 230 Vac		
Code	**Type**	**Value w/m**
A	**413.16**	**16**
B	**413.33**	**33**
C	**413.49**	**49**
D	**413.66**	**66**

Catalog Number	Start-Up Temperture °F (°C)	Maximum Circuit Length per Circuit Breaker, feet (meters)									
		120V					240V				
		15A	20A	30A	40A	50A	15A	20A	30A	40A	50A
AHTG 413.16	50 (10)	180 (54)	240 (73)	358 (109)	358 (109)	358 (109)	360 (109)	480 (146)	709 (216)	709 (216)	709 (216)
	0 (-18)	141 (42)	187 (57)	281 (85)	358 (109)	358 (109)	281 (85)	375 (114)	562 (171)	709 (216)	709 (216)
	-20 (-29)	129 (39)	172 (52)	258 (78)	345 (105)	358 (109)	258 (78)	345 (105)	517 (157)	689 (210)	709 (216)
	-40 (-40)	120 (36)	159 (48)	239 (72)	319 (97)	358 (109)	239 (72)	319 (97)	478 (145)	638 (194)	709 (216)
AHTG 413.33	50 (10)	107 (32)	142 (43)	213 (65)	253 (77)	253 (77)	213 (65)	284 (86)	427 (130)	502 (153)	502 (153)
	0 (-18)	87 (26)	116 (35)	174 (53)	232 (70)	253 (77)	174 (53)	232 (70)	348 (106)	464 (141)	502 (153)
	-20 (-29)	81 (24)	108 (32)	162 (49)	216 (65)	253 (77)	162 (49)	216 (65)	324 (98)	432 (131)	502 (153)
	-40 (-40)	76 (23)	101 (30)	152 (46)	202 (61)	253 (76)	152 (46)	202 (61)	303 (92)	404 (123)	502 (153)
AHTG 413.49	50 (10)	78 (23)	104 (31)	156 (47)	203 (62)	203 (62)	156 (47)	208 (63)	312 (95)	400 (122)	400 (122)
	0 (-18)	65 (19)	87 (26)	130 (39)	174 (52)	203 (62)	130 (39)	174 (52)	261 (79)	347 (105)	400 (122)
	-20 (-29)	61 (18)	82 (24)	122 (37)	163 (49)	203 (62)	122 (37)	163 (49)	245 (74)	326 (99)	400 (122)
	-40 (-40)	58 (17)	77 (23)	115 (35)	154 (46)	192 (58)	115 (35)	154 (46)	230 (70)	307 (93)	384 (117)
AHTG 413.66	50 (10)	58 (17)	78 (23)	117 (35)	155 (47)	174 (53)	117 (35)	155 (47)	233 (71)	311 (94)	348 (106)
	0 (-18)	50 (15)	67 (20)	100 (30)	134 (40)	167 (50)	100 (30)	134 (40)	200 (61)	267 (81)	334 (101)
	-20 (-29)	47 (14)	63 (19)	95 (28)	126 (38)	158 (48)	95 (28)	126 (38)	190 (57)	253 (77)	316 (96)
	-40 (-40)	45 (13)	60 (18)	90 (27)	120 (36)	150 (45)	90 (27)	120 (36)	180 (54)	240 (73)	300 (91)

Series connection constant wattage heating cable

AHTG 106

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

AHTG 106 Series connection constant wattage heating cable use the core conductor as the heating element,when the core conductor connect to power supply, the core conductor will send out joule heat, same as they are of the entire cable length, the heating value of each unit is the same.

This will not result in a situation that the power in the terminal end is lower than it is in the beginning end as the heating cable length increases. So this type is suitable for long pipe-line and large diameter pipeline's heat tracing and heat preservation. Power supplied by one power point.

For Chemical Or Natural Gas Pipeline Series Resistance Heating Cable.

Tecnical data

Min. Installation Temperature	-40°C
Rated Voltage	110V-120V 220V-380V 660V 1100VMax.
withstand temperature	J3 - 205°C,J4 - 250°C
Dielectric strength	2 x nominal voltage + 2500VOuter
Dimensions	5.9*12.5mm
Insulation resistance	≥750MΩ/Km
Certifications	CE,EAC,EACEX,ATEX

Part Number	Core conductor's structure	Cross section mm^2	Resistance M/km@20 °C
AHTG-J3.3.0	19*0.45	3	5.83
AHTG-J3.4.0	19*0.52	4	4.87
AHTG-J3.5.0	19*0.58	5	3.52
AHTG-J3.6.0	19*0.64	6	2.93
AHTG-J3.7.0	19*0.69	7	2.51
AHTG-J4.3.0	19*0.45	3	5.83
AHTG-J4.4.0	19*0.52	4	4.87
AHTG-J4.5.0	19*0.58	5	3.52
AHTG-J4.6.0	19*0.64	6	2.93
AHTG-J4.7.0	19*0.69	7	2.51

7 layer parallel constant wattage self limited heating cable

AHTG 109

2 years warranty

AHTG 109 Parallel constant wattage self limited heating cable can be used for pipe and equipment freeze protection and process temperature maintenance requiring high power output or high temperature exposure.This type provides an economical alternative to self-regulating heating cable but requires more skill for installation and more advanced control and monitor system.

Constant wattage heating cables can provide process temperature maintenance up to 150℃ and can withstand exposure temperature up to 205℃ with power on.

Structure

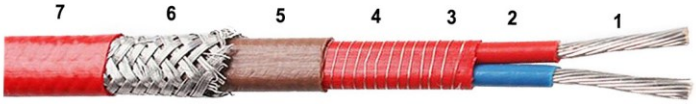
AHTG 109 Single phase constant wattage heating cable used to freeze protection, heat preservation for all kinds of pipelines and instruments. Application such as factory Zone 1 Zone,2 explosive gas atmosphere area.

Working principle

Two paralleled stranded copper wire as the bus wires with insulation layer FEP, then wrap the nickel-chromium alloy as the heating wire connect with bus wires at regular intervals, form the parallel resistance,finally covered with insulation jacket FEP.

When the bus wires power on, each parallel resistance begins to heat,this form a continuous heating cable.

Tinned copper stranded



1. Wire
2. FEP insulation layer
3. FEP insulation layer
4. Ni-Cr alloy wire
5. PEP insulation layer
6. Tinned copper Metal braid
7. FEP outer sheath

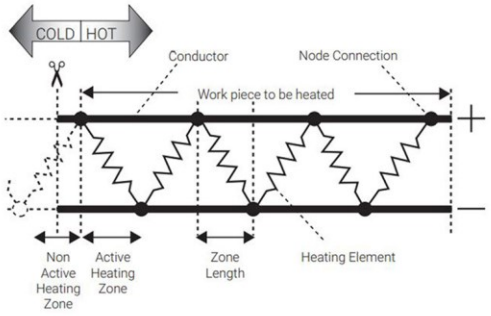
Rated Voltage: 220V

Normality insulation resistance: > 20M ohm

Dielectric strength: 2000V 50Hz/I min

Max exposure temperature: 205 0 c

Protection level: IP54



AHTG CODE	Rated power	Max usage	Max Maintence Temperature(℃)	Sheath color
AHTG 109.10	10	210	150	Black
AHTG 109.20	20	180	120	Orange
AHTG 109.30	30	150	90	Blue
AHTG 109.40	40	140	65	Red

Silicone constant wattage heating cable

AHTG 108

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

Application

Ground heating of building, refrigerators and were houses, Chute heating, gutter and roof defrosting.

General purpose up to 200 °C

Description

Good temperature resistance. The whole body uses silicone rubber as the insulation (including power cord), and work environment temperature is -60 to ±200 C.

Good heat-conducting property: Generate heat energy by passing to directly conduct heat, high thermal efficiency, capable of heating in short time to achieve the effect.

Reliable electrical property: when each heat tape leaves the factory, conduct strict DC resistance, soaking high pressure, insulation resistance and other tests to ensure quality.

Firm structure, flexibility and easy bending: combine the whole cooling end section, no binding point, easy installation.

Strong design ability: heating length, lead wire length, rated voltage and power are determined by users.

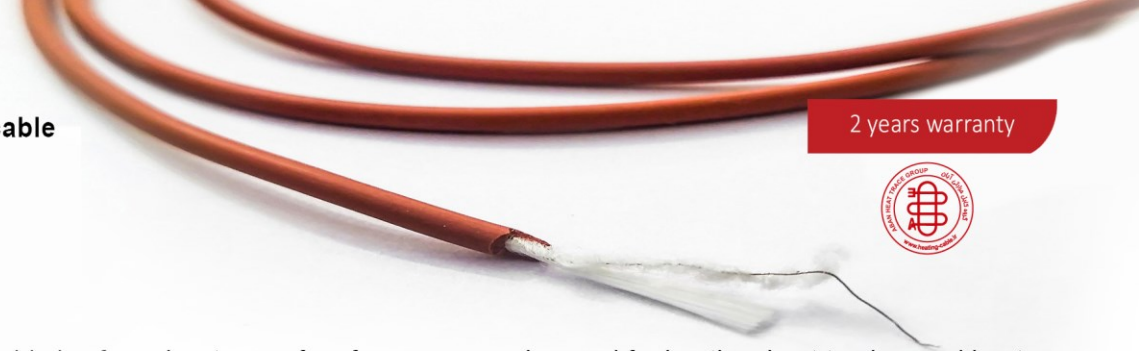
Product Structure

1. Heating wires are two tinned copper wires with section of 0.75 mm².
2. Isolated layer is made of silicone rubber by extrusion.
3. High strength alloy wire spiral and silicon rubber surface are the heating center.
4. Airtight cladding made by extrusion method.
5. Immergence withstand voltage 3500 V AC
6. Insulation Resistance ≥ 200 mm²

AHTG CODE	108.20	108.30	108.40	108.60	108.80
Voltage	36 V-240 V	36 V-240 V	36 V-240 V	36 V-240 V	36 V-240 V
Busbar size	0.75 mm	0.75 mm	0.75 mm	1 mm	1 mm
Wire insulation material	silicone rubber	S.R	S.R	S.R	S.R
heating body alloy	Cu-Ni	Cu-Ni	Cu-Ni	Cu-Ni	Cu-Ni
heating coil external insulation	silicone rubber	S.R	S.R	S.R	S.R
heating body	5mm*7mm	5mm*7mm	5mm*7mm	6mm*8mm	6mm*8mm
use longest limit	65 m	50 m	44 m	40 m	38 m
Distance between nodes	0.3 m	0.3 m	0.5 m	0.5 m	0.5 m

Flexible silicone heating cable

AHTG 107



2 years warranty

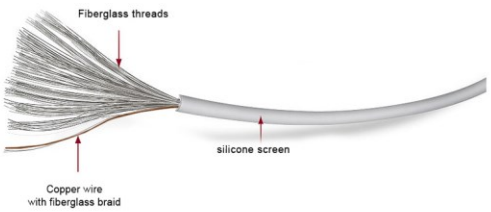
AHTG 107 silicone heating cable is of good waterproof performance, can be used for heating, heat tracing and heat preservation of pipelines, pots and tanks of industrial equipment or laboratory in moist places without explosive gas.

- It is mainly composed of nickel-chromium alloy wires and insulating material, and has fast heating speed, high heat efficiency and long service life.
- fiber glass core is wound with electric heating wires, silicone rubber is used as main insulation, the heat resistance performance is excellent, and the insulation performance is reliable.
- It has great flexibility, and can be directly wound on a to be heated device, with good contact and uniformity heating.

Application:

1.Refrigerators, air conditioners, freezers defrost
2. Rice cooker heat preservation
3.Electric blanket
4.Electric heating cushion
5.Electric massage chair
6.Medical and beauty equipment
7.Electric thermal clothing
8.Electric heating shoes
9.Bath pool heat
10.Footbath heat
11.Pipeline and tank insulation antifreeze
12.Car window heat and etc.

Technical data of Silicone heating cable	
Out Diameter(mm)	2 ~ 5
Heating wire material	Nichrome or CuNi
Insulating Layer	Silicone rubber
Resistance (ohm/m)	10 ~ 30
Temperature (C°)	30 ~ 180
Voltage	220 V
Insulation resisitance	>100MΩ



MADE IN IRAN
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MI cables are made in special manufacturing process taking a single or several heating alloy as the heating source, electric melting crystal magnesium oxide of high purity and high temperature as the thermal insulator and seamless stainless steel or copper tube as the sheath. PE sheath or that with low smoke and zero halogen can be added in the place exposed in strong corrosion.

- MI heating cables with stainless steel sheath

MI heating cables with stainless steel sheath can be used in the environment of high temperature and great heating power (up to 269 w/m). Its maximum temperature resistance can be up to 600 C, the resistance of conductor is within 28000-19.2Ω/km.
MI cables are of excellent mechanical strength and corrosion proof.

- MI heating cables with copper sheath

MI heating cables with copper sheath can be used in the environment of high temperature and for long pipe transmission. Its maximum temperature resistance can be up to 250 C, the resistance of conductor is within 480-0.5Ω/km; as for those to be corrosion protected or buried underground, HDPE sheath (MIHC) shall be added, the maximum temperature resistance of MIHC can be up to 90 C; MI cables are of excellent mechanical strength.

- MI heating cables with copper nickel alloy sheath

MI heating cables with copper nickel alloy sheath can be used in the environment of high temperature and for long pipe transmission. Its maximum temperature resistance can be up to 400 C, the resistance of conductor is within 28000-19.2Ω/km; MI cables are of excellent mechanical strength and corrosion proof product standards.

Comply with IEC800 (92) Heating Cables with a Rated Voltage of 300/500 V for Comfort Heating and Prevention of Ice Formation for cables with maximum heating temperature less than 250 C and comply with the enterprise standard for those above 250 C.

Tolerance of resistance: ±10%
Dielectrically property – withstand voltage of heating cable: 1200VAC/1min
Insulation resistance – test of finished products: 100MΩ/500VDC
Continuity of sheath – the insulation resistance shall be tested after soaking the whole heating cable in water for 12h (including joints), and the value must be 50MΩ/500VDC at least

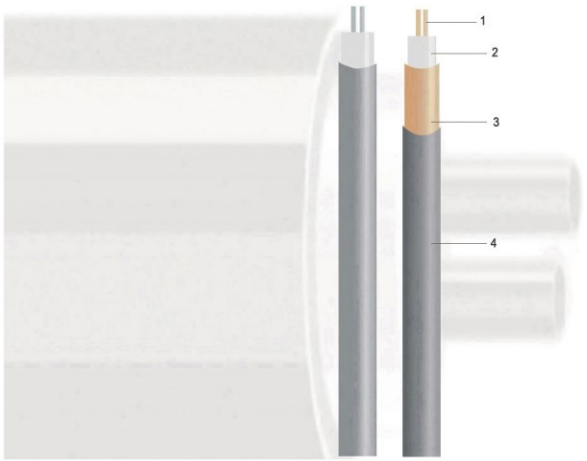
2 years warranty

Product Structure

1. Outer Sheath: SS321, 825 Alloy, Copper, Copper-Nickel Alloy
2. Mineral insulation
3. Alloy resistance wire

Features

- Constant Wattage Series Resistance Heating Cable Sets
- Process Temperature Maintenance up to 900 C°
- Maximum Exposure Temperature 648 C°(Power Off)
- Corrosion Resistant Stainless Steel Sheath
- Factory Assembled Cable Sets— Ready for Installation
- Fully Annealed Sheath allows Field Bending
- For Use on Metallic Pipes Only



Product Construction

1 One or two conductor	Heating elements
2 First insulation	Mgo provides insulation of the resistance wire for voltage up to 593C
3 Inner jacket	This alloy has excellent resistance to pitting, chloride-stress, acid and alkali corrosion.
4 Outer jacket	For corrosive environments or extra ruggedness when embedded in concrete.

There are many advantages when using Mineral Insulated (MI) Cable as bellow:

- Installation: MI cables are round and are annealed, making them easy to form and to install.

- Heat Output: MI cables are constant output, providing uniform heat over the entire length of the cable.
So MI cables are best choice Especially for heat trace of transmission pipes that have high-viscosity and high-speed materials.

- Inrush: MI cables are constant wattage, eliminating the need to oversize the breakers to allow for inrush current.

- Terminations: MI cables are terminated in a controlled Factory environment and tested to insure their integrity and that they are moisture proof.

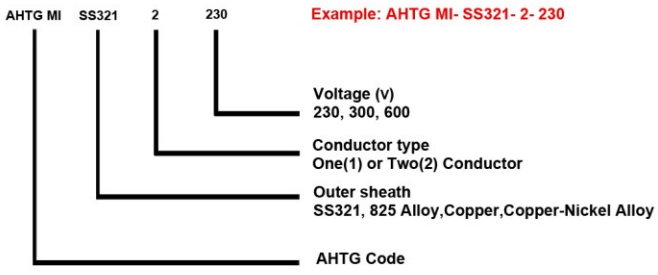
- Fire Safety: MI cables are manufactured from nonflammable materials and damaged or defective product will not cause a fire or safety concern.

- Degradability: MI cables are made on inorganic materials that will not degrade.

- System Life: MI cables have a life expectancy of 25 to 30 years. But Self-Regulating cables have a life expectancy

- Corrosion: MI cable consists of one or two solid conductor heating elements, embedded in a highly compressed magnesium oxide or 321and higher stainless steel base on NACE standard, So MI cables used has a high resistance to corrosive and acidic environments compared to other cables.

Product Structure



1. Outer Sheath: SS321, 825 Alloy, Copper, Copper-Nickel Alloy
2. Mineral insulation
3. Alloy resistance wire

2 years warranty

ABAN HEAT TRACE GROUP electrical trace heating cables, are used to counteract the effects of heat lost from process pipe and tanks equipment.

This dissipation allows a drop in temperature, bringing about unacceptable consequences such as frozen pipes,reduced fluid viscosity, etc.

The use of heat trace cable replaces the heat lost, maintaining the desired temperature through the application of the required wattage.

There are two general categories of Electrical Heat Trace Cable:

Constant Wattage and Self-Limiting, or Self-Regulating cable

Each style of heat trace cable serves different applications.

Which cable do i need?

Selecting the proper cable depends on many different factors such as:

The pipe size, exposure temperatures, ambient conditions, insulation type and thickness, maintenance temperatures, heat up rate, the corrosiveness of the environment, flow rate, and type of material involved all play a part in determining which cable is best for your application. This product catalog will help you make the best choice.

Differences of Constant wattage cable & Self-regulating cable

Constant Wattage Heating Cable: This style of heat trace cable is designed to put out a certain amount of wattage per linear foot at a particular voltage It is always putting out the designed watts per meter, no matter what the surface or ambient temperature is. This means that in most situations, the heating cable is continually pumping heat into the vessel or pipe being maintained or heated. in some types, If the heat trace cable is not attached to some kind of control device, it has the potential to overheat itself. This would not only ruin the cable, but could cause damage to whatever it is being used on. So constant wattage cable must be controlled by some means.

Self-Limiting, or Self-Regulating Cable:

This cable will self-adjust its power output in relation to the surface temperature as well as ambient conditions.

In other words, the hotter the conditions get, the lower the wattage output becomes.

This characteristic allows this type of cable to be used without a control device. However, if a particular temperature is required, then a control device must be used.

Higher temperature maintenance, and long pipes and higher maximum exposure temperatures will use the constant wattage cables.

Lower temperature maintenance applications, like freeze protection, can use the self-limiting cable, although constant wattage cable can be used too.

Electrical underfloor heating system is easy to install, economical to run and is environmentally friendlier than many alternatives, reducing heating bills and it is increasingly becoming recognised as a great energy efficiency measure. The easy of installation of Heat Mat underfloor heating is one of the major benefits of it and each room uses its own thermostat which monitors the floor and air temperature to ensure your room is always exactly the temperature that you require

DOMESTIC DEVISION

ABAN HEAT TRACE GROUP

2 years warranty

Introduction

108 mat underfloor heating mat used a twin conductor heating cable for easy installation and this mat is with zero EMF.desinged for installation into thin adhesive beds, leveling compounds or this screed beds beneath tiled and wooden floor finish.

150w/m^2 underfloor heating mats are suitable as a primary heating source providing you adequtate insulation. These are our most commonly used mats for kitchen,dinig rooms,larg bathroom and most other areas with tiled floors.200w/m^2 underfloor heating mats are generally used in areas where high heat loss is a problem,such as conservatories. these mats are only suitable for under-tiled floors,giving a 25% faster warmer up time.

Features

- Zero EMF
- Self-adhesive mat
- One cold lead 2.5 meter
- Flexible and 100% screened
- Twin conductor heating cable

Technical Data

Cable construction	Twin conductor
Conductor material	Solid heating core
Insulation material	FEP
Insulation optional	TPEE-XLPE
Shield	Aluminum-plastic tape or tinned copper wires
Protective jacket	PVC/FEP
Connector	Out splice
Outer diameter	3.6mm
Rated voltage	230Vac
Power output	150w/m^2, 200w/m^2
Resistance tolerance	+10% / -5%
Certifications	CE EAC SP

Under floor heating cable

108.12
108.18

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

INTRODUCTION

cable underfloor heating cable is designed to be as thin as possible, diameter only 3.6mm, have two different wattage, ensure the economic and energy saving and decrease the floor level to the maximum extent. Designed for installation under tile, wood floor, marble floor, usually set installation 100W/m², 150W/m² and 200W/m².

FEATURES

*Twin conductor heating cable
*Flexible installation
*Emit zero EMF (electromagnetic fields)
*Durable construction
*Single point safety connection

TECHNICAL DATA

Cable construction	Twin conductor
Conductor material	Solid heating core
Insulation material	FEP
Insulation optional	TPEE for T-cable(T), XLPE for T-cable(X)
Shield	Aluminum-plastic shield
Outer Insulation	PVC
Connector	Out splice
Outer diameter	3.6mm
Rated Voltage	230V
Power output	12W/m, 18W/m
Resistance tolerance	+10%/-5%
Cold lead	2.5m length

Certifications:

Part Number	heating area/m^2	Length/m	Power Output/w	Resistance/Ω
108.12-150	1	12.5	150	323
108.12-225	1.5	18.8	225.6	215
108.12-300	2	25	300	161
108.12-375	2.5	31.3	375.6	129
108.12-450	3	37.5	450	108
108.12-525	3.5	43.8	525.6	92
108.12-600	4	50	600	81
108.12-675	4.5	56.3	675.6	72
108.12-750	5	62.5	750	65
108.12-900	6	75	900	54
108.12-1050	7	87.5	1050	46
108.12-1200	8	100	1200	40
108.12-1350	9	112.5	1350	36
108.12-1500	10	125	1500	32

2 years warranty

AHTG F-MAT

F-mat underfloor heating mats consist of twin conductor heating cable with fluoropolymer insulation and embed in a reinforced aluminium foil mat.the mat total thickness is ultra-thin, decreasing the floor height and increasing the comfort level.

F-mat underfloor heating mats can be turned to achieve the required floor coverage and multiple mat can be join toghether to cover large areas.when fitting underfloor heating, a suitable insulation should always be used (especially over concrete sub floors).

80w/m and 150w/m^2 mats are provided for option. the 150w/m^2 electric heating system can be used as a primary heat sourch, just for floor warming.

Features

- Fully earthed
- Ultra-thin
- Twin conductor heating cable
- One cold lead, 2.5 meter
- Flexible installation

Technical Data

Cable construction	Twin conductor
Conductor material	Solid heating core
Insulation material	Fluoropolymer
Cable spacing	50mm
cable diameter	1.0mm
Connector	Out splice
Min installation temperature	5 C°
Rated voltage	230 Vac
Power output	80w/m^2, 150w/m^2
Resistance tolerance	+10% / -5%
Cold lead	2.5m lenght
Certifications	CE EAC SI

2 years warranty

AHTG
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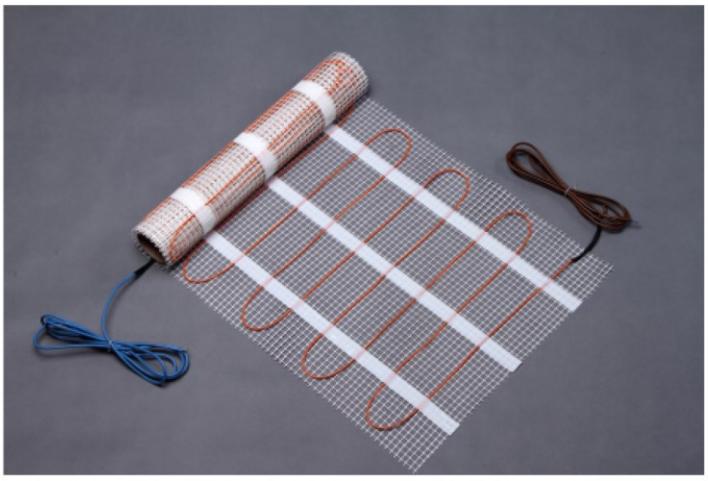
S-mat underfloor heating mat is designed to be as thin as possible and 100% screend. the cable is designed for installation into thin adhesive beds, leveling compunds or thin screed beds beneath tiled and wooden floor finish. 100 w/m^2 underfloor heating cable provides a highly economical floor warming system and is used to cover larger areas. 100 w/m^2 is not suitable as a primary heating source, only to be used as secondary heating for under tiled floors.

150w/m^2 underfloor heating cable is suitable as a primary heating sourch providing you adequate insulation. These are our most commonly used mats for kitchen, dining rooms, large bathrooms and most other areas with tiled floors.

- Single conductor heating cable
- Flexible installation
- Emit zero EMF (electromagnetic fields)
- Dorable construction
- Two cold leads, 2.5 meters each



Technical Data

Cable construction	Single conductor
Conductor material	Solid heating core
Insulation material	Fluoropolymer
Shield	Copper wire
Protective jacket	PVC
Connector	Out splice
Outer diameter	2.6mm
Rated voltage	230Vac
Power output	100w/m^2, 150w/m^2
Resistance tolerance	+10% / -5%
Certifications	CE EAC

Snow melting mat

AHTG 114

2 years warranty

Advantages

Cost savings

Saves your annual cost of snow removal and deicing chemical

Time savings

saves your time and effort spent on managing snow manually.

Minimizes personal injury risk

Provides peace of mind by eliminating ice related accidents at your home or office.

Preserves your property

Slows down surface decay due to damage caused by snowplows, shovels,salting and other chemical snow preventives.

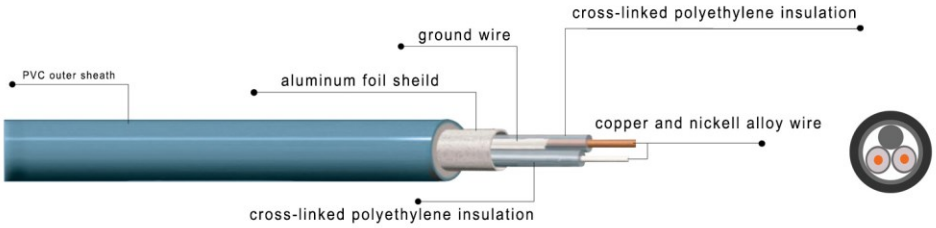
Product structure	Technical parameter
Cable construction	Two conductor
Rated voltage	220V
Output power (mats)	300 w/m^2
Heating element size (mats)	Length 2- 20 m *width 0.5m
Cable diameter	7.8 mm
Conductor insulation	Fluoropolymer XLPE
Outer insulation	PVC
Max, insulation temp	105 C$^\circ$
Min, insulation temp	5 C$^\circ$
Cold lead	2.5 M

Constatnt wattage heating cable

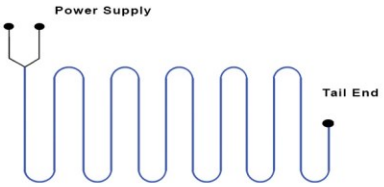
AHTG 110

2 years warranty

AHTG
ABAN HEAT TRACE GROUP



There are two heating cores inside the double-conductor heating cable.The tail of the heating connected to form a loop.In construction, only the head end is connected with the power supply and can be placed arbitrarily according to the specific situation, thus greatly reducing the difficulty of construction.



AHTG CODE	Power (w)	Voltage (v)	Standard lenght (m)	power per meter (m)	Total resistance (m)
AHTG 110- 1	3300	220	194.1	17	14.7
AHTG 110- 2	2800	220	164.7	17	17.3
AHTG 110- 3	2600	220	152.9	17	18.6
AHTG 110- 4	2400	220	141	17	20.2
AHTG 110- 5	2100	220	123.5	17	23.0
AHTG 110- 6	1700	220	100.0	17	28.6
AHTG 110- 7	1370	220	80.6	17	35.3
AHTG 110- 8	1250	220	73.5	17	38.7
AHTG 110- 9	100	220	58.6	17	48.4
AHTG 110- 10	840	220	49.4	17	57.6
AHTG 110- 11	700	220	41.12	17	68.1
AHTG 110- 12	600	220	35.3	17	80.7
AHTG 110- 13	500	220	29.4	17	96.8
AHTG 110- 14	400	220	23.5	17	121.0
AHTG 110- 15	300	220	17.6	17	161.1

Roof and guter heating cable

AHTG 900 Series
AHTG 903 Series
AHTG 902-18

2 years warranty

AHTG 900 Series heating cables is designed for both roof and gutter or ground application.

The twin conductor heating cable for easy installation with zero EMF. Fully screened twin conductor cable with a tough black UV protected PVC outer sheath, to install in out door application such as roof and gutter or ground application.Its round profle makes it simple to istall in outdoor applications such as roof and gutter or ground application.

Technical Data

Cable construction	Twin conductor
Conductor	Solid heating core
Insulation	XLPE (Cross linked PE)
Shield	Aluminum-plastic tape and tinned copper wire
Protective jacket	PVC
Connector	Out splice
Outer diameter	6-6.5 mm
Rated voltage	230Vac
Power output	20W/m, 30W/m
Resistance tolerance	+10% / -5%
Certifications	CЄ

900-30—50M
900-20—150M
901-30—100M
903-30—50M
903-20—75M

Product advantages

1.Durable and strong structure
2.High water-proofness. IP68
3.Long working life
4.Small size ,no increase in floor thickness
5.100% screened with Zero EMF
6.100% tested before delivery
7.Free of maintenance
8.Anti-UV

AHTG 902-18 heating cable; in winter, when the accumulated snow on walkways, parking garage, loading ramps, stairways and other areas, it will bring problem to people's life.

Electric snow melting systems can keep walkways, parking garage, loading ramps,stairways and other areas free of snow and ice to help prevent slip hazards.Electric snow melting systems provide surface snow melting and anti-icing for concrete surfaces and pavers.

Technical Data

Cable construction	Twin conductor
Conductor	Solid heating core
Insulation	XLPE (Cross linked PE)
Shield	Aluminum-plastic tape and tinned copper wire
Protective jacket	PVC
Connector	Out splice
Outer diameter	5.5-6 mm
Rated voltage	230Vac
Power output	20W/m, 30W/m
Resistance tolerance	+10% / -5%
Certifications	CЄ

Product Advantages

* Twin conductor heating cable
* 100% screened
* In Coil packaging, cut as needed
* Zero EMF

902.18--30 W/M -- 98 M

Controller

AHTG Home series

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

AHTG Code: 1020

LCD thermostat (button type)

Technical data

Voltage: 220V / 230V, 5060/HZ

Boundary dimension: 90×86×45mm

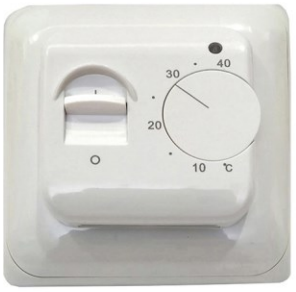
Temperature control range: 5- 60 C°

Temperature control accuracy: ±1 C°

Maximum load current: 16A

Housing protection: IP20

LCD slanting interface.,Carrying a temperature sensor.



AHTG Code: 1040

Mechanical thermostat (knob type)

Technical data

Voltage: 230V (AC 110V / AC 24V)

Boundary dimension: 86×86×53mm

Temperature control range: 5- 40 C°

Temperature control accuracy: ±1 C°

Maximum load current: 16A

Housing protection: IP20

Carrying a temperature sensor.

AHTG Code: 1030

European standard thermostat (touch type)

Technical data

Voltage: 220V / 230V, 5060/HZ

Boundary dimension: 90×86×45mm

Temperature control range: 5- 90 C°

Temperature control accuracy: ±1 C°

Maximum load current: 16A

Housing protection: IP20

LCD slanting interface, Carrying a temperature sensor.

Digital Smart Wifi Electronic Heat Thermostat

Thermostat range: -9.5C~ 80.0C

Overall dimension: 86*86*40mm

Temperature sensing elements: thermistorExternal

wire diameter: 2,5 square mini-meter (mm)²

Temperature control precision: ±1 C

Working temperature: 85~265VAC 50\60Hz

Mounting hole spacing: 60mm (standard)

Shell: flame retardant PC material

Floor temperature range: -9.5C~80.0C

Rated power: 16A

AHTG 1021

AHTG 1023

AHTG 1022

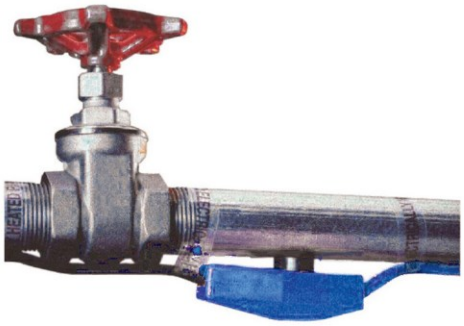
Pipe di-icing with thermostat

AHTG 1110

2 years warranty

Heating cable with temperature sensor is composed of heating cable, a temperature switch a power cord and a power plug.easy to install, convenient and fast. It is household test tubes It is suitable for metal pipes and plastic pipes.

Product Picture



AHTG CODE	Electric tropics length (m)	Cold line length (m)
AHTG 1110	1	1.8
AHTG 1111	2	1.8
AHTG 1112	4	1.8
AHTG 1113	8	1.8
AHTG 1114	12	1.8
AHTG 1115	14	1.8
AHTG 1116	18	1.8
AHTG 1117	24	1.8
AHTG 1118	36	1.8
AHTG 1119	48	1.8

Pipe di-icing

AHTG 1110-A

2 years warranty

Flexible silicone heating bands
AHTG 1001-F

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

AHTG 1001-F silicone falexible heating bands are thin, light, water and ozone proof and allow you to heat metal surfaces which could not heat easily.

AHTG 1001-F silicone heating bands stick to the drum, tanks or capsule enclosure of elastic springs located on the ends. Due to its flexibility, the heating band adapts to the surface of the drum, thus improving on the performance of conventional clamps because it avoids the creation of air bubbles and dust that act as thermal insulators.

General characteristics

- Temperature range: up to +180 °C in continuous use.
- Adjustable thermostat 20 °C to 180 °C protected by silicone.
- Silicone connection cable 2000 mm long.
- Material support: Rubber, silicone plus fiber glass with laminated metallic iron strap.
- Standard voltage ~230 V
- Other specification can be provided based on customer need

Infrared Heaters

AHTG 1001-H

2 years warranty

The ceramic heater is an efficient and powerful heater that provides long and medium wavelength infrared radiation.The ceramic heater is manufactured using a specialised process that requires the alloying of an electrically resistive wire, which is fused to the ceramic body.

Subsequently, the ceramic body is given a layer of enamel to protect it from humidity. Moreover, it protects the heater from corrosive and atmospheric attack. In this way ceramicnheating elements optimise the characteristics of maximum absorption, operating at temperatures which range from 300ºC to 750ºC,with the emission of wavelengths ranging from 3 to 7 microns.

The ceramic heater has been designed so as to offer a very high efficiency (more than 85% in appropriately designed systems), flexibility of arrangement, interchangeability for maintenance, long life, and uniformity from heating element to heating element. The ceramic heating elements are the chosen heaters in the majority of elemets

Clamp Belt element

AHTG 1001-C

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

General characteristics

• Galvanized or stainless steel sheat.

• Heating element of Nickel-Chrome high quality material, wound around mica insulator adaptable to high temperatures (up to 500ºC depending on constructions)

• Possibility of making entries for thermocouple, links or holes as per the client's needs

• Normal execution with screw closure or bolt flange with Allenscrew.

• Different types of electric connection: Screws - Plugged in - Flexible leads - Ceramic connector.

• Optional executions:

- Articulated with hinge.

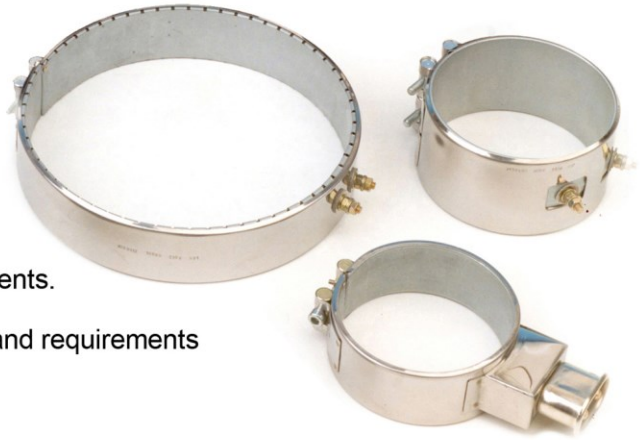
- Double thermic insulation.

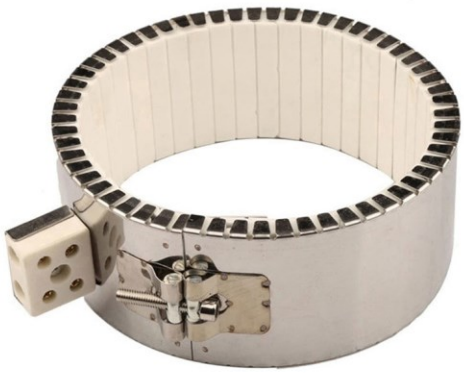
- Air chamber.

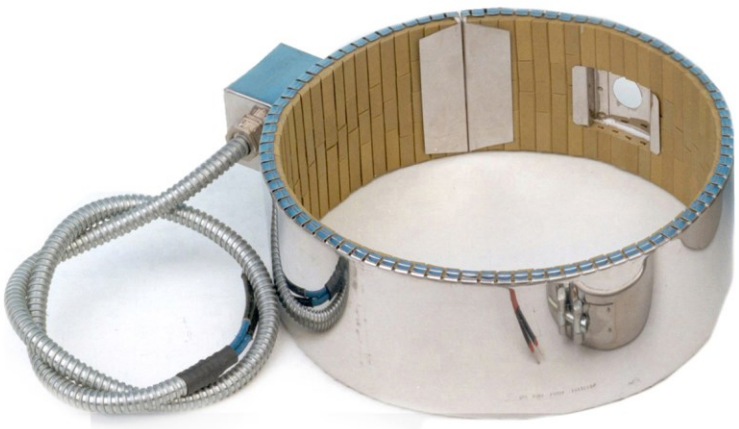
- With ceramic or mica support or shielded heating elements.

• Sizes, watts and volts as per technical characteristics and requirements

• Explosion proof enclosure type





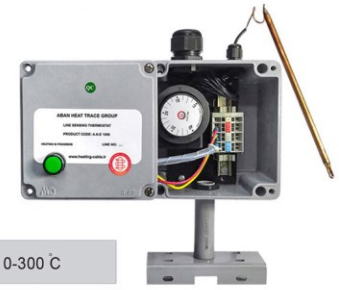


Line sensing thermostat

AHTG 1000

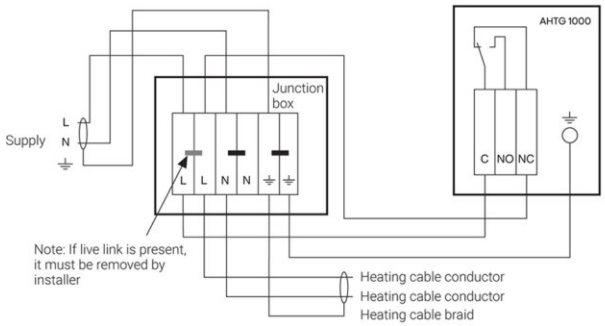
2 years warranty

AHTG 1000 , line sensing (pipe mounted) thermostat ideal for freeze protection and process temperature maintenance applications.



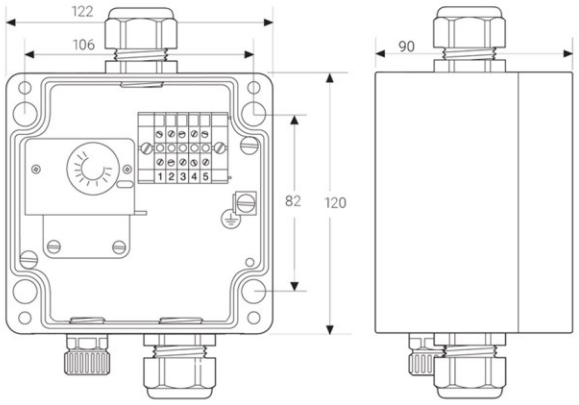
Temperature range	0 - 40 C̊, 30-90 C̊, 0-300 C̊
Capillary lenght	120 (cm)
Dimension (mm)	130*130*90
Protection degree	IP67
Bracket type	AHTG 820.110, AHTG1616-10
Switching capability	220 V 10 A max, 110 V 16 A max

CONNECTION DETAILS AND THERMOSTAT CONTROL SYSTEM

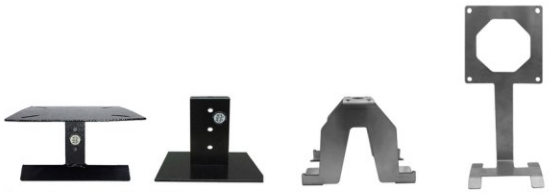


PRODUCT SPECIFICATIONS

Dimensions (in mm)



Stand-Off



AHTG CODE	AHTG 1616-10	AHTG 1313-10	AHTG 147-10	AHTG 136-28
Length diameter	160mm	130mm	140mm	130mm
Width diameter	160mm	130mm	70mm	60mm
Height diameter	100mm	100mm	100mm	280mm
Material	Galvanized metal	Galvanized metal	Carbon steel	Carbon steel

Stand-Off

AHTG CODE	1027-330	1032-220	820-110
External diameter	27mm	32mm	20mm
Internal diameter	27mm	23mm	16mm
Height diameter	100mm	100mm	80mm
Material	Galvanized metal	Galvanized metal	Galvanized metal

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Ambient thermostat

AHTG 1050

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

AHTG 1050 Ambient thermostat is ideal for domestic sector specially for measuring the temperature and humidity in order to implement an optimal heat tracing system for the walk ways, ramps, roofs, etc.

Temperature range	- 40 _ 80 C
Humadity range	0-100%
Dimension (mm)	250*350*150 - 300*400*170
Protection degree	IP65
Contactor	25A
Relay output	7A

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Ex-Capillary thermostat

AHTG 1000Ex

2 years warranty

The capillary thermostat **AHTG1000Ex** is approved for use in hazardous areas Zones 1 and 2 for gas and Zones 21 and 22 for dust as a surface thermostat on pipes and vessels.

There are different temperature ranges possible. The material of the capillary tube is stainless steel and the rugged enclosure is made of aluminium.

Applications:

Industrial applications,Use in hazardous areas,Heat tracing on pipes,valves and vessels,Oil & gas industry

Technical data

IP rating	IP 66
Ambient temperature	0 up to 40 °C [CT], 30 °C up to 90 °C [CT(2)],0 °C up to 300 °C
Switching capacity	16 A at 230 V [CT] / 10 A at 400 V [CT(2) only]
Switching differential	1pol. [CT], 1 pol., changeover contact [CT(2)]
Switching contact	1pole
Capillary tube	Stainless steel
Length of capillary tube	1.5 m
Metrial enclosure	coated aluminium
Bending radius capillary tube	5 mm
Cable entrance	1 x gland M20, clamping range 10-14 mm1 x thread M 20 x 1.5
Ex-Classification	II 2G Ex db IIC T6 Gb II 2D Ex tb IIIC T80°C Db Ta -32°C...+50°C [CT] Ta -50°C...+50°C [CT(2)](Important: Classification is subject to modification depending on the cable entrances used by the customer!)

Power connector

AHTG 804N

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

Part Number:	**AHTG 804N**
Material:	**Polyamide**
Dimensions:	**140mm*30mm*30mm**
Entries:	**One heat port & One power port**

End seal box

AHTG 805

2 years warranty

Part Number:	**AHTG 805**
Material:	**GRP**
Dimensions:	**110mmx110mmx60mm**
Color:	**RAL 1003, Signal black**
Entries:	**One standard M20 one M25**

GRP power connection box

AHTG 804

2 years warranty

Part Number:	**AHTG 804**
Material:	**GRP**
Dimensions:	**110mmx110mmx60mm**
Color:	**RAL 1003, Signal yellow**
Entries:	**One standard M20 one M25**

Ex power connection box

AHTG 804 Ex

2 years warranty

Part Number:	**AHTG 804 Ex**
Material:	**GRP**
Dimensions:	**120mm *120mm *85mm**
Color:	**RAL 1003, Signal dark blue**
Entries:	**One standard M20 one M25**
Ip degree:	**IP69**

Maximum rated Voltage: 500V

Maximum rated Current: 400V

Ex II 2 G D Exe IIC T6 ID A21 T85C

Low-profile splice & tee connection

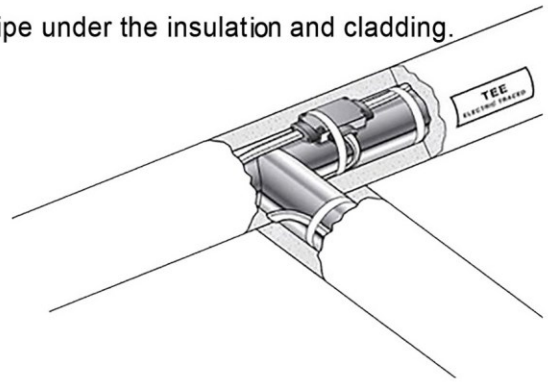
AHTG 802, 803

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

Description

The **AHTG 802,803** are splice and tee connection kit designed for use with all ABAN HEAT TRACE GROUP parallel type heating cables. it is designed to be placed on the pipe under the insulation and cladding.



Tools required

- Screwdriver
- Utility knife
- Wire cutters

Additional materials required

fiberglass tape

AHTG 23-10

AHTG 23-20

AHTG 802

APPROVALS

Hazardous Location

Sutiable for heating cable type AHTG 301,411,412

Exe II C T 4, CE, ATEX

AHTG 803

Simple and fast to install

Corrosion resistant

Reliable during long life: 2 years extended product warranty available, maintenance free

Splice connection kit

AHTG 802 N

2 years warranty

AHTG 802 N is a cold-applied low profile splice for trace heating cables in both non-hazardous and hazardous locations.

Includes cold-applied heating cable core sealer.

Low-profile end seal

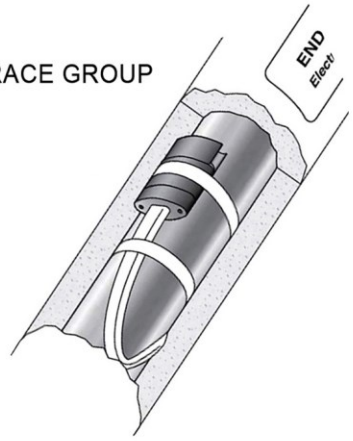
AHTG 800,801

2 years warranty

Description

The **AHTG 800,801** are type end seal kit designed for use with all ABAN HEAT TRACE GROUP parallel type heating cables.

It is designed to be placed on the pipe under the insulation and cladding.



Tools required

- Screwdriver
- Utility knife
- Wire cutters

Additional materials required

fiberglass tape

AHTG 23-10
AHTG 23-20

AHTG 800

Approvals

Hazardous Location
Sutiable for heating cable type AHTG 301,411, 412
Exe II C T 4, CE , ATEX

AHTG 801

Simple and fast to install
Corrosion resistant
Reliable during long life: 2 years extended product warranty available, maintenance free

LED Indicator end seal

AHTG 800 L

2 years warranty

AHTG 800 L is a cold-applied high profile end seals for trace heating cables in both non-hazardous and hazardous locations.

Mounted on the pipe, through the thermal insulation and cladding, with LED light indicator available.

Resin type end seal

AHTG 201 E-03

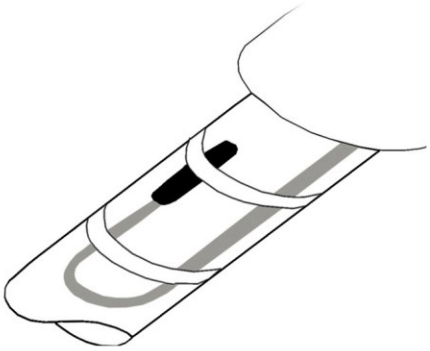
2 years warranty

AHTG
ABAN HEAT TRACE GROUP

AHTG 201 E-03 is designed for all kind of electrical heating cables up to 205 Celsius degree.

The end kits employ easy to use heat shrinkable tubing with an adhesive,that when heated forms a semiflexible moisture proof encapsulation.

the termination can be installed directly on the pipe.One end seal kit is required for each termination.



AHTG 201 E-03	
Application	sealant for all type of cable up to 205 C°
Kit contents	Heat shrinkable Adheive coated sleeves installation instruction

Resin type end seal

AHTG 201 E-03N

2 YEARS Warranty

The end kits employ easy to use heat shrinkable tubing with an adhesive,that when heated forms a semiflexible moisture proof encapsulation. the termination can be installed directly on the pipe.

One end seal kit is required for each termination.

Maximum Voltage/ Current: 277V / 20A

Silicone power seal

AHTG 105

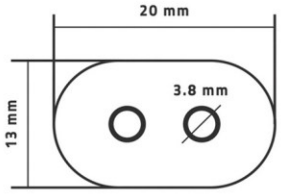
2 years warranty

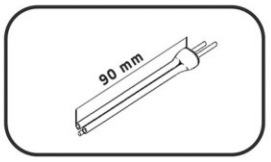
AHTG 105 is designed to terminate the parallel heating cable.made from the best material with a special formula of silicone rubber by the experts of **ABAN HEAT TRACE GROUP** for use up to a temprature of 250 degrees Celsius.

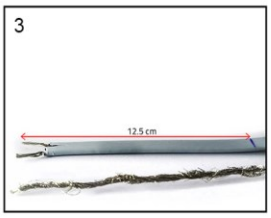
made from halogen free materials and has a voltage insulation resistance of up to 2000 V and a thermal resistance of up to 800 degrees Celsius in short time conditions and temparature of 250 degrees and at constant working situation.

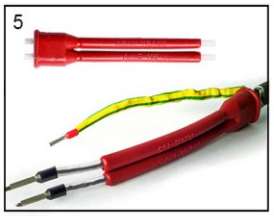
This product includes a **5** year warranty from **ABAN HEAT TRACE GROUP.**

Part number:	AHTG 105
Materail:	Special silicone rubber
Dimensions:	90mm*20mm*13mm
Weight:	5gr









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Accessoreis

2 years warranty

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AHTG 10

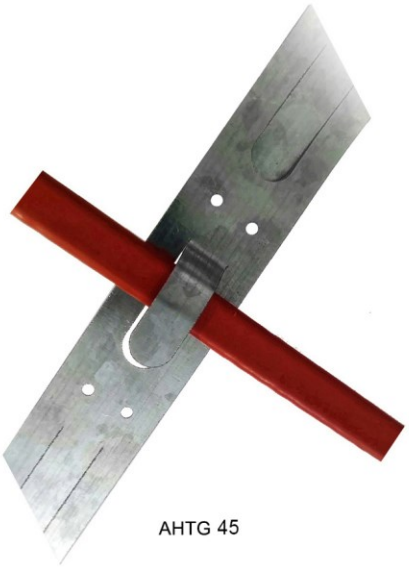
AHTG 100
Termination kit

AHTG 15
Pipe strap with lock

AHTG 8-25 Ex

AHTG 30

AHTG 35



AHTG 45

AHTG 40

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Stianless steel cable nameplate holder

AHTG 104

2 years warranty

Part Number:	**AHTG 104**
Material:	**Stainless steel 316**
Dimensions:	**100mm * 80mm *20mm**
Weight:	**25 gr**
Thinkness:	**0.3 mm**

330 C° High temperature RTV silicone sealant

AHTG 24

RTV Silicone tape
Hi-temp red silicone

Great for

Oil pans
Value covers
Water pumps
Timing covers

Aluminium foil

AHTG 50.30

Temperature uniformity aluminium foil
use immediately after installation

High temperature resistance tape

2 years warranty

AHTG
ABAN HEAT TRACE GROUP

Warning Use with gloves

Part Number	Lenght	Width (mm)	Material
AHTG 23-10	33 M	10mm	Fiberglass
AHTG 23-20	33 M	20mm	Fiberglass

Aluminum tape

Aluminum tape suitable for protecting fixing and installation temperature. resistant from -40 °C to +140 °C high adhesive strength.

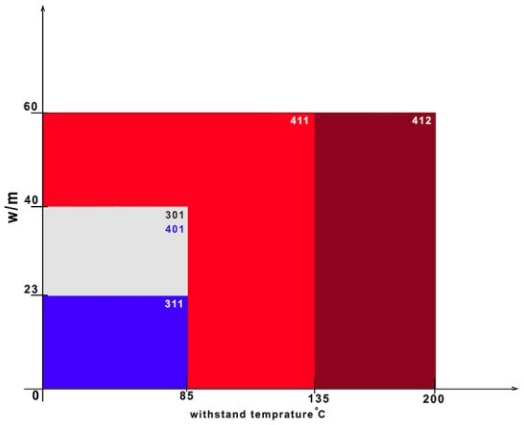
Aluminum tape is coated with a special adhesive layer on the aluminum foil tape. It is used for fixing heating cables & controling divices on the pips and tanks.

Part Number	Lenght	Width (mm)	Material
AHTG 21-48	23 m	48mm	Alu
AHTG 21-50	45 m	50mm	Alu

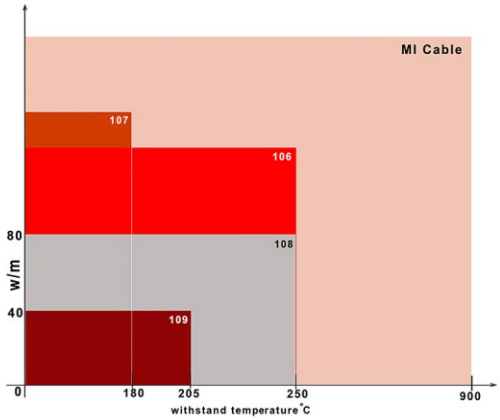
Electrical heat tracing sign

AHTG 1010

2 years warranty



Self-regulating AHTG heating cable



Constant wattage AHTG heating cable