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
monitoring & controlling



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' experience in electrical heat trace project.

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 ABAN HEAT TRACE GROUP.Co is ready to cooperate with industrial and domestic sector regarding the heat tracing projects







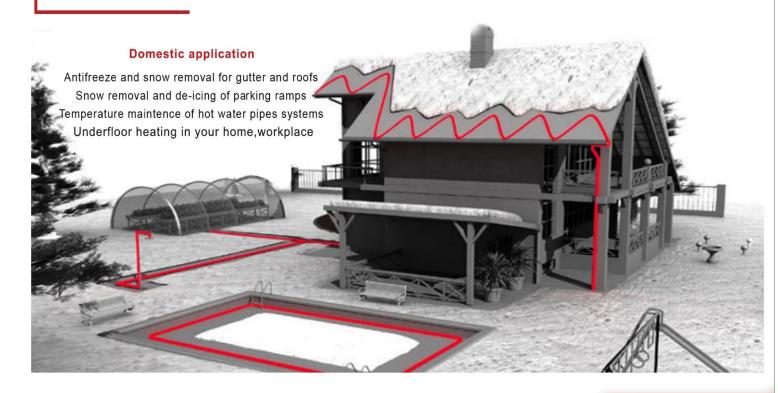




Industrial



Domestic



INDEX

Industrial

Domestic

| Self-regulating heating cable | 1 - 11 |
|---|---------|
| Low temperature type A.N.E 301 | 2 |
| A.N.E 401 | |
| A.N.E 311 | |
| Medium temperature type | |
| A.N.E 411 | 8 |
| High temperature type | |
| A.N.E 412 | 10 |
| Constant wattage heating cable | 12 - 16 |
| Mineral cable | 12 |
| A.N.E 107 Flexible silicone heating cable | 14 |
| A.N.E 108 Silicone constant cable | 15 |
| A.N.E 109 Parallel constant cable | 16 |
| | |
| Heating mat | 17 - 22 |
| Mat type | |
| T mat | 17 |
| F mat | 18 |
| S mat | 19 |
| A.N.E PRODUCT | |
| A.N.E 112 | 20 |
| A.N.E 113 | 21 |
| A.N.E 114 | 22 |
| A.N.E 110 Home use constant cable | 23 |
| A.N.E 900 | 24 |
| A.N.E 902-18 | 25 |
| Accessories | 26 - 37 |



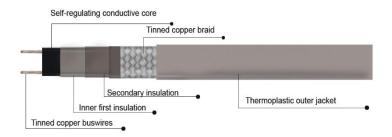
Self-Regulating A.N.E heating cable

| A.N.E 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- 20 | | | | 20 | Bus wire: Tinned copper Conductor: PTC | | | | 151 | | | | | | | | | | | | | |
| 301- 30 | | 12.8*5.8 | 16 AWG | 30 | Insulation: Inner Sheild: tinned copper braid | 65C [°] | 85C° | -40C° | 98 | | | | | | | | | | | | | |
| 301- 40 | | | | 40 | Jacket: Thermoplastic (5 Layer) | | | | 72 | | | | | | | | | | | | | |
| 311- 11 | | | | 11 | Bus wire: Tinned copper Conductor: PTC | | | | 145 | | | | | | | | | | | | | |
| 311- 17 | | 10.4*5.3 | 18 AWG | 17 | Insulation: Thermoplastic Sheild: tinned copper braid | 65C [°] | 85C [°] | -40C | 120 | | | | | | | | | | | | | |
| 311- 23 | | | | Jacket: Thermopla (5 Layer) | | | | | 100 | | | | | | | | | | | | | |
| 401- 16 | | | | 16 | Bus wire: Tinned copper Conductor: PTC | | | | 151 | | | | | | | | | | | | | |
| 401- 30 | | 10.7*4.5 | 10.7*4.5 | 10.7*4.5 | 10.7*4.5 | 10.7*4.5 | 10.7*4.5 | 16 AWG | 30 | Insulation: Inner Sheild: tinned copper braid | 65C° | 85C | -40C° | 98 | | | | | | | | |
| 401- 40 | | | | 40 | Jacket: Thermoplastic (5 Layer) | | | | 72 | | | | | | | | | | | | | |
| 411- 35 | | | | 35 | Bus wire: Tinned copper | | | | 100 | | | | | | | | | | | | | |
| 411- 45 | | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 13.3*6.1 | 16 AWG | 45 | Conductor: PTC Insulation: Thermoplastic Sheild: tinned copper braid | 110C° | 135C | -40C° | 85 |
| 411- 60 | | | | 60 | Jacket: fluoropolymer (5 Layer) | | | | 70 | | | | | | | | | | | | | |
| 412- 30 | | | | 30 | Bus wire: Tinned copper | | | | 130 | | | | | | | | | | | | | |
| 412- 45 | | 10.6*4.6 | 10.6*4.6 | 16 AWG | 16 I.6 AWG | 45 | Conductor: PTC Insulation: Thermoplastic Sheild: tinned copper braid | 120C° | 200C | -40C° | 90 | | | | | | | | | | | |
| 412- 60 | | | Jacket: fluoropolymer (5 Layer) | | | | Jacket: fluoropolymer | | | | 70 | | | | | | | | | | | |

Self-Regulating heating cable

A.N.E 301

2 YEARS Warranty



Introduction

A.N.E 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 | 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 | C€,EAC,EACEX,ATEX |

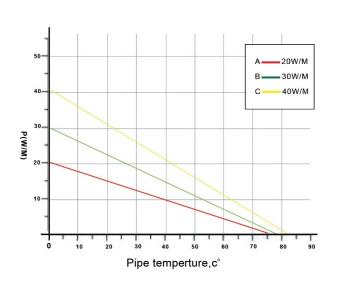


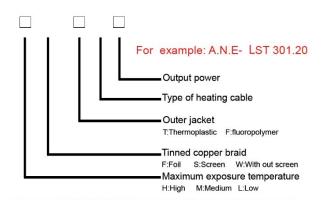


Application

A.N.E 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 hermoplastic jacket can also be used in hazardous area and corrosive area. The cable with UV stabilized thermoplastic elastomer outer jacket is provided to cover the braid for wet applications and exposure to the sun.

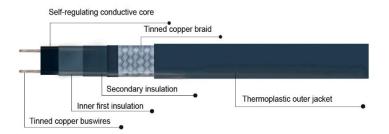




| Nominal pov | Nominal power Output @ +10 C, 230 Vac | | | | | | | |
|-------------|---------------------------------------|----|--|--|--|--|--|--|
| Code | Code Type Value W/m | | | | | | | |
| Α | ANE-301.20 | 20 | | | | | | |
| В | ANE-301.30 | 30 | | | | | | |
| С | ANE-301.40 | 40 | | | | | | |

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/m²) | Maximum Maintain Temperature (C) | Max lenght @+10 C° 16/30A (m) | Max lenght @+0 C° 16/30A (m) | Max lenght @-20 C° 16/30A (m) | Dimension (mm) | Weight (kg/100m) |
|----------------|-----------------------------|--|-------------------------------------|------------------------------------|-------------------------------------|-------------------|---------------------|
| A.N.E- 301.20 | 20 | 65 | 110/151 | 100/124 | 86/98 | 12.8 * 5.8 | 11.5 |
| A.N.E- 301.30 | 30 | 65 | 71/98 | 60/77 | 52/65 | 12.8 * 5.8 | 11.5 |
| A.N.E- 301.40 | 40 | 65 | 62/72 | 52/60 | 45/53 | 12.8 * 5.8 | 11.5 |



Self-Regulating heating cable

A.N.E 401

2 YEARS Warranty

Introduction

A.N.E 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, 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,EAC,EACEX,ATEX |

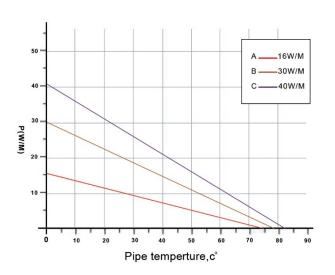


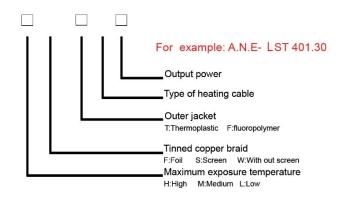


Application

A.N.E 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.

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





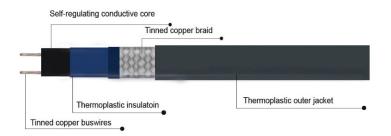
| Nominal power Output @ +10 C, 230 Vac | | | | | | |
|---------------------------------------|---------------|-----------|--|--|--|--|
| Code | Туре | Value W/m | | | | |
| Α | ANE-401.16 | 16 | | | | |
| В | ANE-401.30 30 | | | | | |
| С | ANE-401.40 | 40 | | | | |

| PART NUMBER | Output power +10C@(w/m²) | Maximum Maintain Temperature (C) | Max lenght @+10 C° 16/30A (m) | Max lenght @+0 C° 16/30A (m) | Max lenght @-20 C° 16/30A (m) | Dimension (mm) | Weight (kg/100m) |
|----------------|-----------------------------|--|-------------------------------------|------------------------------------|-------------------------------------|-------------------|---------------------|
| A.N.E- 401.16 | 16 | 65 | 110/151 | 100/124 | 86/98 | 10.7 * 4.5 | 7.25 |
| A.N.E- 401.30 | 30 | 65 | 71/98 | 60/77 | 52/65 | 10.7 * 4.5 | 7.25 |
| A.N.E- 401.40 | 40 | 65 | 62/72 | 52/60 | 45/53 | 10.7 * 4.5 | 7.25 |



A.N.E 311

2 YEARS Warranty



Introduction

A.N.E 311 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 inorganic chemicals and protected against abrasion and impacted damage. Typical application is heat trace designs and applications.



Technical Data

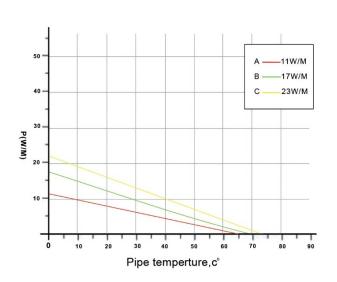
| Output Wattage | 11, 17, 23(w/m) |
|----------------------------------|----------------------|
| Maximum maintain temperature | 65C° |
| Maximum exposure temperature | 85C° |
| Minimum installation temperature | -40C° |
| Work voltage | 110V-120V / 220-240V |
| Max resistance of braid | ≤18.2 Ω /km |
| Bus wire gauge | 18AWG |
| Approvals | CE,EAC,EACEX,ATEX |

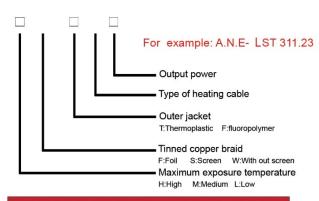




Application

A.N.E 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 non-hazardous area, then cable with Thermoplastic outer jacket can also be used in hazardous area and corrosive area.to the sun.

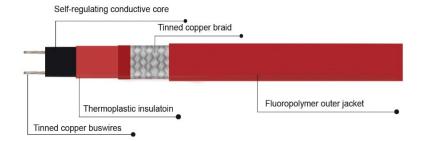




| Nominal power Output @ +10 C, 230 Vac | | | | | | | |
|---------------------------------------|--------------|----|--|--|--|--|--|
| Code | Value w/m | | | | | | |
| A | A ANE-311.11 | | | | | | |
| В | ANE-311.17 | 17 | | | | | |
| С | ANE-311.23 | 23 | | | | | |

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/m²) | Maximum Maintain Temperature (C) | Max lenght @+10 C° 16/30A (m) | Max lenght @+0 C° 16/30A (m) | Max lenght @-20 C° 16/30A (m) | Dimension (mm) | Weight (kg/100m) |
|----------------|-----------------------------|--|-------------------------------------|------------------------------------|-------------------------------------|-------------------|---------------------|
| A.N.E- 311.11 | 11 | 65 | 120/145 | 121/140 | 108/120 | 10.4 * 5.3 | 8.4 |
| A.N.E- 311.17 | 17 | 65 | 115/120 | 106/120 | 95/115 | 10.4 * 5.3 | 8.4 |
| A.N.E- 311.23 | 23 | 65 | 75/100 | 72/91 | 65/84 | 10.4 * 5.3 | 8.4 |



Self-Regulating heating cable
A.N.E 411

2 YEARS Warranty

Introduction

A.N.E 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 | 35, 45, 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 | C€ ,EAC,EACEX,ATEX |

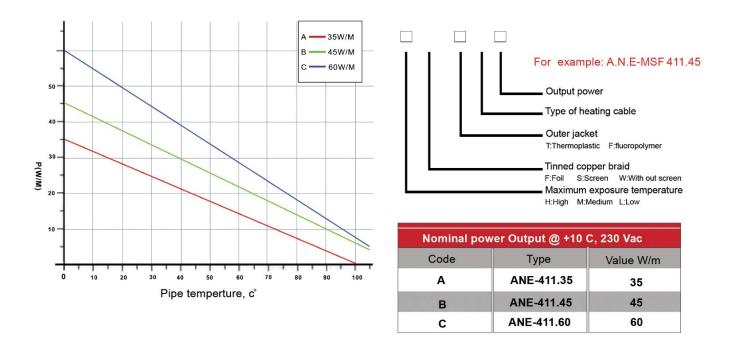




Application

A.N.E 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 non-hazardous area, and cable with fluoropolymer outer jacket can also be used in hazardous area and corrosive area.



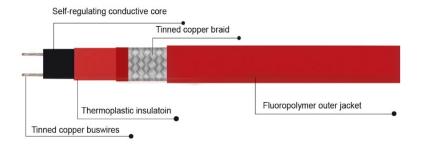
Fluoropolymer outer jacket is used for exposure to organic or corrosive working conditions or vapor may exist.

| PART NUMBER | Output power +10C@(w/m²) | Maximum Maintain Temperature (C) | Max lenght @+10 C° 16/30A (m) | Max lenght @+0 C° 16/30A (m) | Max lenght @-20 C° 16/30A (m) | Dimension (mm) | Weight (kg/100m) |
|----------------|-----------------------------|--|-------------------------------------|------------------------------------|-------------------------------------|-------------------|---------------------|
| A.N.E- 411.35 | 35 | 110 | 75/100 | 65/90 | 45/60 | 13.3 * 6.1 | 12.5 |
| A.N.E- 411.45 | 45 | 110 | 60/85 | 50/75 | 35/50 | 13.3 * 6.1 | 12.5 |
| A.N.E- 411.60 | 60 | 110 | 50/70 | 40/60 | 30/45 | 13.3 * 6.1 | 12.5 |

Self-Regulating heating cable

A.N.E 412

2 YEARS Warranty



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.

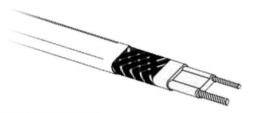
Conversely, as the temperature decreases, the resistance decreases and the cable produces more heat.

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 | 30, 45, 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 |

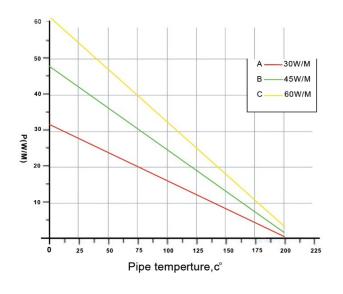


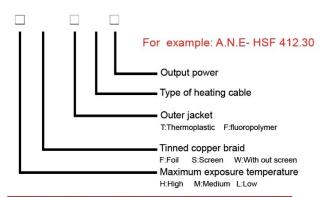
Application

ANE 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.

ANE 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 @ +10 C, 230 Vac | | | | | |
|---------------------------------------|------------|-----------|--|--|--|
| Code | Туре | Value w/m | | | |
| Α | ANE-412.30 | 30 | | | |
| В | ANE-412.45 | 45 | | | |
| С | ANE-412.60 | 60 | | | |

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/m²) | Maximum Maintain Temperature (C) | Max lenght @+10 C° 16/30A (m) | Max lenght @-20 C 16/30A (m) | Max lenght @-40 C° 16/30A (m) | Dimension (mm) | Weight (Kg/100m) |
|----------------|-----------------------------|--|-------------------------------------|------------------------------------|-------------------------------------|-------------------|---------------------|
| A.N.E- 412.30 | 30 | 120 | 85/114/130 | 69/100/114 | 62/88/103 | 10.6*4.6 | 11- 12 kg |
| A.N.E- 412.45 | 45 | 120 | 70/82/90 | 49/75/82 | 44/67/73 | 10.6*4.6 | 11- 12 kg |
| A.N.E- 412.60 | 60 | 120 | 50/64/70 | 38/58/64 | 35/53/59 | 10.6*4.6 | 11- 12 kg |

Mineral insulated heating cable

2 YEARS Warranty

MI Mineral insulated heating cables are the most rugged Heating Cable in our product line.

Constructed of solid series resistor element embedded in highly compacted mineral insulation,

MI cables are built to handle high temperature, high wattage applications.

Mineral insulated cables are factory assembled and tested, ensuring the highest quality product.

Since the units consist of series resistor, virtually any wattage/voltage/lenght cable configuration can be produced within the cables physical operating limits.

Mineral insulated heating cables are available for use to 600V and are tested and approved for use in corrosive and hazardous areas.

It has the advantages of pressure resistance, shock resistance, energy saving, high impermeability, corrosion resistance, explosion prodoction, convenient installation, high mechanical strenght and long service life. Widely use in aerospace, nuclear, petroleum, chemical, construction, machinery, electric energy and other fields.

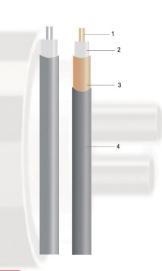
Product Structure



- 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 to 600 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

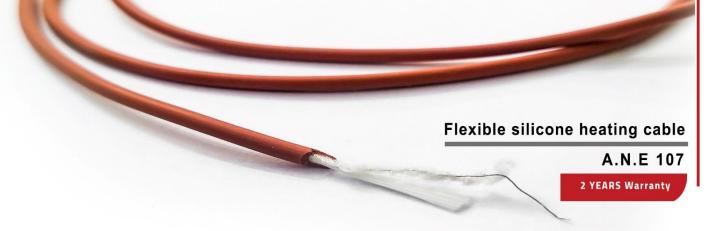


Product Construction

| 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. |

Mineral insulated heating cable(Double conductor)

| Cable Model | Rated Voltage (V) | Power Per Meter (W/M) | Cable Length (M) | Output Power (W) | Resistance (Ohms/Meter) | Resistance (Ohms/Piece) | Outer Sheath Material | Outer Diameter (mm) |
|-----------------|-------------------------|-----------------------------|------------------------|------------------------|----------------------------|----------------------------|-----------------------------|---------------------------|
| ANE-200-20-10 | 220 | 20 | 10 | 200 | 24.2 | 242.00 | SUS321 | 3.5 |
| ANE-400-20-20 | 220 | 20 | 20 | 400 | 6.05 | 121.00 | SUS321 | 4 |
| ANE-600-20-30 | 220 | 20 | 30 | 600 | 2.69 | 80.67 | SUS321 | 4 |
| ANE-800-20-40 | 220 | 20 | 40 | 800 | 1.51 | 60.50 | SUS321 | 4 |
| ANE-1000-20-50 | 220 | 20 | 50 | 1000 | 0.97 | 48.40 | SUS321 | 4 |
| ANE-1200-20-60 | 220 | 20 | 60 | 1200 | 0.67 | 40.33 | SUS321 | 4 |
| ANE-1400-20-70 | 220 | 20 | 70 | 1400 | 0.49 | 34.57 | SUS321 | 4 |
| ANE-1600-20-80 | 220 | 20 | 80 | 1600 | 0.38 | 30.25 | SUS321 | 4 |
| ANE-1800-20-90 | 220 | 20 | 90 | 1800 | 0.3 | 26.89 | SUS321 | 4 |
| ANE-2000-20-100 | 220 | 20 | 100 | 2000 | 0.24 | 24.20 | SUS321 | 4 |
| ANE-300-30-10 | 220 | 30 | 10 | 300 | 16.13 | 161.33 | SUS321 | 3.5 |
| ANE-600-30-20 | 220 | 30 | 20 | 600 | 4.03 | 80.67 | SUS321 | 4 |
| ANE-900-30-30 | 220 | 30 | 30 | 900 | 1.79 | 53.78 | SUS321 | 4 |
| ANE-1200-30-40 | 220 | 30 | 40 | 1200 | 1.01 | 40.33 | SUS321 | 4 |
| ANE-1500-30-50 | 220 | 30 | 50 | 1500 | 0.65 | 32.27 | SUS321 | 4 |
| ANE-1800-30-60 | 220 | 30 | 60 | 1800 | 0.45 | 26.89 | SUS321 | 4 |
| ANE-2100-30-70 | 220 | 30 | 70 | 2100 | 0.33 | 23.05 | SUS321 | 4 |
| ANE-2400-30-80 | 220 | 30 | 80 | 2400 | 0.25 | 20.17 | SUS321 | 4 |
| ANE-2700-30-90 | 220 | 30 | 90 | 2700 | 0.2 | 17.93 | SUS321 | 4 |
| ANE-3000-30-100 | 220 | 30 | 100 | 3000 | 0.16 | 16.13 | SUS321 | 4 |
| ANE-600-60-10 | 220 | 60 | 10 | 600 | 8.07 | 80.67 | SUS321 | 3.5 |
| ANE-1200-60-20 | 220 | 60 | 20 | 1200 | 2.02 | 40.33 | SUS321 | 4 |
| ANE-1800-60-30 | 220 | 60 | 30 | 1800 | 0.9 | 26.89 | SUS321 | 4 |
| ANE-2400-60-40 | 220 | 60 | 40 | 2400 | 0.5 | 20.17 | SUS321 | 4 |
| ANE-3000-60-50 | 220 | 60 | 50 | 3000 | 0.32 | 16.13 | SUS321 | 4 |
| ANE-3600-60-60 | 220 | 60 | 60 | 3600 | 0.22 | 13.44 | SUS321 | 4 |
| ANE-4200-60-70 | 220 | 60 | 70 | 4200 | 0.16 | 11.52 | SUS321 | 4 |
| ANE-4800-60-80 | 220 | 60 | 80 | 4800 | 0.13 | 10.08 | SUS321 | 4 |
| ANE-5400-60-90 | 220 | 60 | 90 | 5400 | 0.1 | 8.96 | SUS321 | 5 |



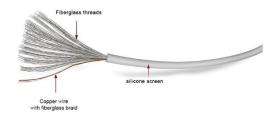
A.N.E 107 silicone heating cable is of good waterproof performance, can be used for heating, heat tracing and heat preservation of pipelines, pots and tanks of industrial equipment or laboratory in moist places without explosive gas.

- 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 uniform 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 | | | |







Silicone constant wattage heating cable

A.N.E 108

2 YEARS Warranty

Application

Ground heating of buildings, refrigerators and were houses; chute heating, gutter and roof deforsting.

Description

Good temperature resistance. The whole body use silicon rubber as the insula (including power cord), and work environment temperature is -60 to ± 200 C°.

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

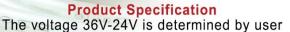
Reliable electrical property: when each heat tape leaves the factory, conduct strict DC resistance, soaking high pressure, insulation resistance and other tests to ensure quality.

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

Strong designability: heating lenght, lead wire lenght, rated voltage and power are determined by users.

Product Structure

- 1-Heating wires are two tinned copper wire with section of 0.75 mm.
- 2-Isolated layer is made of silicon rubber by extrusion.
- 3-High strenght alloy wire spiral and silicon rubber surface are the heating center
- 4-Airtight cladding made by extrusion method



25w/m, with stand voltage AC3500V, use longest limit 65m 40w/m, with stand voltage AC3500V, use longest limit 50m 50w/m, with stand voltage AC3500V, use longest limit 44m



| ANE CODE(Part Number) | 108.20 | 108.30 | 108.40 | 108.60 | 108.80 |
|----------------------------------|----------------|----------------|----------------|----------------|----------|
| Voltage | 36V-240V | 36V-240V | 36V-240V | 36V-240V | 36V-240V |
| Busbar size | 0.75mm | 0.75mm | 0.75mm | 1mm | 1mm |
| Wire insulation material | Silicon rubber | Silicon rubber | Silicon rubber | Silicon rubber | S.R |
| Heating body alloy | Cu-Ni | Cu-Ni | Cu-Ni | Cu-Ni | Cu-Ni |
| heating coil external insulation | Silicon rubber | Silicon rubber | Silicon rubber | Silicon rubber | S.R |
| Heating body | 5mm*7mm | 5mm*7mm | 5mm*7mm | 6mm*8mm | 6mm*8mm |
| Use longest limit | 65m | 50m | 44m | 40m | 38m |
| Distance beween nodes | 0.3M | 0.3M | 0.5M | 0.5M | 0.5M |

- 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

Parallel constant wattage heating cable

A.N.E 109





ANE 109 Parallel constant wattage 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°C and can withstand exposure temperature up to 205°C with power on.

Structure

ANE109 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

| Part Number | | Rated | Max Usage | Max Maintence | Sheath | |
|--------------|---------------|----------------|--------------|-------------------|--------|--|
| ANE CODE | COMMON MODEL | power (w/m) | (m) | Temperature(C) | Color | |
| A.N.E 109.10 | RDP2HR-J3- 10 | 10 | 210 | 150C [°] | Black | |
| A.N.E 109.20 | RDP2HR-J3- 20 | 20 | 180 | 120C | Orange | |
| A.N.E 109.30 | RDP2HR-J3- 30 | 30 | 150 | 90 C | Blue | |
| A.N.E 109.40 | RDP2HR-J3- 40 | 40 | 140 | 65C° | Red | |



Line sensing thermostat

A.N.E 1000

2 YEARS Warranty



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

| TEMPERATURE RANGE | 30_ 90 C° 0_ 300 C° |
|-----------------------|-----------------------------|
| CAPILLARY LENGHT | 120 (CM) |
| DIMENSION(MM) | 130*130*90 |
| PROTECTION DEGREE | IP 67 |
| BRACKET TYPE | A.N.E 820.110 A.N.E 820.120 |
| SWITCHING CAPABIILITY | 110.220 V 16 A MAX |

BRACKET TYPE









| A.N.E CODE |
|-------------------|
| External Diameter |
| Internal Diameter |
| Lenght of pipe |
| Material |
| |

| A.N.E 1027 -330 | A.N.E 1032 -220 | A.N.E 1313 -10 | A.N.E 820 -110 |
|------------------|------------------|------------------|------------------|
| 27mm | 32mm | 13mm | 20mm |
| 27mm | 23mm | 13mm | 16mm |
| 10 cm | 10 cm | 10 cm | 8 cm |
| Galvanized Metal | Galvanized Metal | Galvanized Metal | Galvanized Metal |

GRP power connection box

A.N.E 804

2 YEARS Warranty

Junction Boxes are an essential piece of kit as they protect and insulate electrical connections, whether commercially or in a domestic environment. All of the products within the range benefit from being quick and easy to install whist being easy to maintain once wired.

Part Number: A.N.E 804

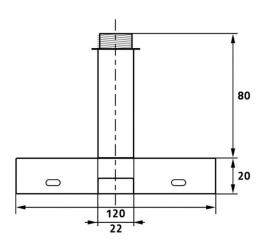
Material: GRP

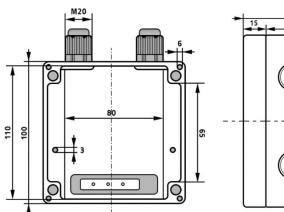
Dimentions: 110mmx110mmx60mm

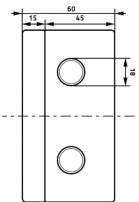
Color: RAL 1003, Signal yellow

Entries: One standard M20 one M25









Silicone power seal

A.N.E 105

2 YEARS Warranty



ANE 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.

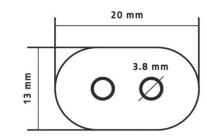
This material has a voltage insulation resistance of up to 2000 V and has a thermal resistance of up to 800 degrees Celsius in short time conditions and temparature of 250 degrees and at constant working situation. This product includes a 5 year warranty from **ABAN HEAT TRACE GROUP**.

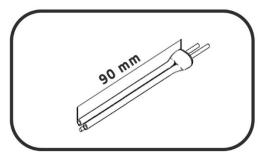
Part number: A.N.E 105

Materail: Special silicone rubber

Dimensions: 90mm*20mm*13mm

Weight: 5g







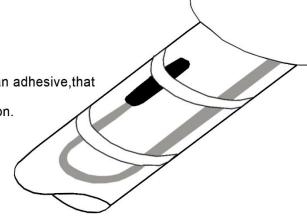
A.N.E 201 E-03

2 YEARS Warranty

A.N.E 201 E-03 is designed for all kind of electrical heating cabels up to 205 Celsius degree.

All kits are approved use in hazardous area

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



Due to its low profile design the finished termination can be installed directly on the pipe. One end seal kit is required for each termination.

| A.N.E 201 E-03 | |
|----------------|---|
| Application | sealant for all type of cable up to 205 $\ensuremath{\text{C}}^\circ$ |
| Kit contents | Heat shrinkable Adheive coated sleeves installation instruction |

Approvals

II 2G/D EEx e II by PTB and Baseefa 2001 Ltd, according to EN 50 014, EN 50 019 DNV Certificate No.E-6967



Low-profile end seal kit

A.N.E 800,801

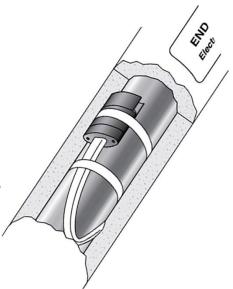
2 YEARS Warranty

DESCRIPTION

The ANE 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

Glass cloth tape

ANE 23-10 Installation temperature above 40° F[4 C]
ANE 23-20 Installation temperature above -40° F[-40 C]



ANE 800

APPROVALS



Simple and fast to install

Corrosion resistant

Reliable during long life: 5 years extended product warranty available, maintenance free







ANE 801

Low-profile splice & tee connection kit

A.N.E 802,803

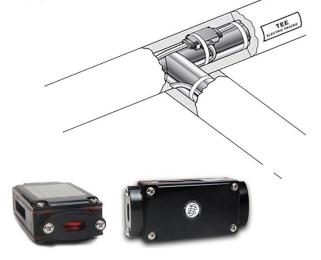
2 YEARS Warranty

DESCRIPTION

The ANE 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



ANE 802

ADDITIONAL MATERIALS REQUIRED

Glass cloth tape

ANE 23-10 Installation temperature above 40° F[4 C°]
ANE 23-20 Installation temperature above -40° F[-40 C°]

APPROVALS

Hazardous Location A.N.E 300 & A.N.E 412 & A.N.E 411 Heating cables Exe II C T 4, CC, ATEX



ANE 803

Simple and fast to install

Corrosion resistant

Reliable during long life: 5 years extended product warranty available, maintenance free

Stianless steel cable nameplate holder

A.N.E 104

2 YEARS Warranty

Part Number: A.N.E 104

Material: Stainless steel 316

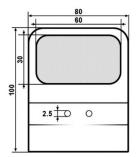
Dimentions: 100mm*80mm*20mm

Weight: 25g

Thinkness: 0.3mm







330 C High temperature RTV silicone sealant

A.N.E 24

RTV SILICONE HI-TEMP RED SILICONE

GREAT FOR

OIL PANS
VALUE COVERS
WATER PUMPS
TIMING COVERS





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