HEATING CABLE

U Series
Heat Trace Connection Kits/Accessories

Single Entry Power Connection Kit
- NEMA 4X
- Entry for 1 Cable
- 3/4” Conduit Hub Opening
- Lighted or Non-Lighted

Multiple Entry Connection Box
- NEMA 4X
- Entry for up to 3 Cables
- Power, Splice or Tee Connection
- 3/4” Conduit Hub Opening

Above Insulation End Seal Kit
- NEMA 4X
- Fits All Pipe Sizes
- Mounts Above the Insulation for Easy Access
- Lighted or Non-Lighted

Pipe Standoff Kit
- Brings Cable Outside Insulation to Customer Supplied Junction Box

Under Insulation End Seal Kit
- 3” Dia. Curved Mounting Surface
- Stainless Steel Hardware
- 1” Wide Strapping Channel for Secure Mounting

Small Pipe Adapter for Pipes Under 1-1/2” Diameter

Description
The U-Series Connection Kits represent cutting edge design in heat tracing accessories. Each model in this series is designed to satisfy the unique demands of a particular operation. These high-quality models combine a variety of functions in a convenient, easy-to-use and economical package.

Applications
These accessories are designed to connect SRL, SRP, SRM/E and CWM heating cables to customer-supplied wiring in any of the following applications:
- Freeze Protection
- Piping Process Temperature Maintenance
- Fluid Flow and Viscosity Maintenance

Approvals
Factory Mutual (FM) Approved and CSA certified for ordinary areas. ATEX, IECEx, FM, and CSA Approved for hazardous (classified) areas.

CSA† and FM Approved
- Class I, Div. 2 Groups A*, B, C, D (gases, vapors)
- Class II, Div. 2 Groups E*, F, G (combustible dust)
- Class III, Div. 2 (easily ignitable fibers & fillings)
- For T-Ratings See Heating Cable
- UPC, UMC, UES, RTES, UESL, SSK Only
  *CSA Only

ATEX Approved
- CE 0359 IIG Ex e IIC T* Gb Ta -60°C to 195°C
- UPC, UMC, UES, RTES Only
  * For T-Ratings See Heating Cable

IECEx Approved:
- ITS 07.0018X Ex e IIC T* Gb Ta -60°C to 195°C
- UPC, UMC, UES, RTES Only
  * For T-Ratings See Heating Cable

*SSK to have these approvals when a junction box is used that is NEMA 4X rated and certified by appropriate third party agency for use for that application and hazardous locations rating (Div. 2).

Features
- Molded of Durable Polyphenylene Sulphide Plastic Material*
- Maximum Pipe Temperature 482°F (250°C)
- Corrosion Resistant
- Thermal Stability
- Non-Flammable
- High Strength and Rigidity
- Captive Hardware
- Stainless Steel Hardware to Ensure the Integrity of the System
- Liquid Tight Design Prevents Moisture from Reaching the Electrical Connections
- All Models are Rated NEMA 4X.

* This crystalline, high-performance engineering TP is characterized by outstanding high-temperature stability, inherent flame resistance and a broad range of chemical resistance. PPS plastics and compounds provide various combinations of high mechanical strength, impact resistance and electrical insulation, with its high arc resistance and low arc tracking.
U Series
Heat Trace Connection Kits/Accessories (cont’d.)

Accessories
UPC Power Connection Box
PCN 393553
NEMA 4X rated junction box designed to connect SRL, SRP, SRM/E and CWM cables to customer supplied power wiring. This kit provides water-resistant cable entry for one cable, enclosure support, terminal block, and a water-resistant corrosion-resistant wiring enclosure with a 3/4” opening to accept a conduit hub (CCH-2 or equal). A pipe strap (PS Series) is required to attach this model to a pipe. Small pipe adapter is available for pipe size less than 1-1/2”.

*Use as end seal for monitor wire cables.

Kit Dimensions: 9.78”H x 4.78”W x 3.6”D

Kit Includes:
1 Junction box with DIN rail & terminal block
1 Compression fitting
1 Locknut
1 Silicone termination boot
1 Pipe standoff
1 O-ring
1 Self-regulating cable grommet
1 Constant wattage cable grommet

UMC Multiple Entry Connection Box
PCN 393561
NEMA 4X rated junction box designed to connect two or three SRL, SRP, SRM/E and CWM cables to customer supplied power wiring. This kit provides water-resistant cable entry, enclosure support, terminal block and a water-resistant, corrosion-resistant wiring enclosure. In addition to splicing or teeing cables, this model can be used to provide power connection to up to three cables from one connection kit. A pipe strap (PS series) is required to attach this model to a pipe. Small pipe adapter is available for pipe size less than 1-1/2”.

*Use as power connection for monitor wire cables.

Kit Dimensions: 9.78”H x 8.69”W x 3.6”D

Kit Includes:
1 Junction box with din rail and terminal block
1 Compression fitting
1 Locknut
3 Silicone termination boots
1 Pipe standoff
1 O-ring
1 Self-regulating cable grommet
1 Constant wattage cable grommet
1 Self-regulating cable grommet insert
1 Constant wattage cable grommet insert

SPA Small Pipe Adapter*
PCN 393609
*Pipe adapter to be used when pipe size is less than 1-1/2” diameter.

Kit Includes:
1 Small pipe adapter
UES Above Insulation End Seal Kit
PCN 393570

NEMA 4X rated end seal designed of to terminate SRL, SRP, SRM/E and CWM cables. This kit provides water-resistant cable entry for one cable, water-resistant and corrosion-resistant pipe support to bring the cable end outside the insulation for easy access. A pipe strap (PS Series) is required to attach this model to a pipe. Small pipe adapter is available for pipe size less than 1-1/2”.

Kit Dimensions: 5.5”H x 2.75”W x 2.25”D

Kit Includes:
1 End cap
1 Pipe standoff
1 Self-regulating cable grommet
1 Constant wattage cable grommet

RTES Under Insulation End Seal Kit
PCN 389570

NEMA 4X rated enclosure is designed to terminate SRL, SRP, SRM/E and CWM cables. This kit provides water-resistant cable entry for one cable, enclosure support and a water-resistant corrosion-resistant enclosure. The fitting has two different curved mounting surfaces. One side has a 1-1/2” radius curved surface that provides stable support on pipes with a diameter of 3” or more. The other side has a 1/2” radius curved surface which permits a better fit on smaller pipes. A pipe strap (PS Series) is required to attach this model to a pipe. In addition, this side also has four “feet” for installation on flat surfaces.

Kit Dimensions: 1.25”H x 1.75”W x 2”D

Kit Includes:
1 End Cap
1 Pressure Plate
1 GRSR Self-Regulating Cable Sealing Grommet
1 GRCW Constant Wattage Cable Sealing Grommet

SSK Single Entry Sealing Kit†
PCN 393617

This kit provides water resistant cable entry for one cable, water-resistant and corrosion-resistant pipe support to bring the cable outside the insulation for easy connection to power. A pipe strap (PS Series) is required to attach this model to a pipe. A small pipe adapter is available for pipe sizes less than 1-1/2”. Customer supplied junction box required.

Kit Includes:
1 Compression fitting
1 Locknut
1 Silicone termination boots
1 Pipe standoff
1 O-ring
1 Self-regulating cable grommet
1 Constant wattage cable grommet
2 Uninsulated butt splice 14-16 AWG
2 Insulated butt splice 14-16 AWG

† Approved for CSA Class I, Div. 2 groups A, B, C & D and Class II, Div. 2, Groups F, G when junction box that is used is NEMA 4X rated and certified by appropriate third party agency for use for that application and hazardous locations rating (Div. 2)
UESL RED End Seal Signal Light Kit
PCN 394257
NEMA 4X rated end seal designed to power or seal one cable and indicate power on with RED universal voltage 120-277V LED indicator light kit designed for use with SRL, SRP, SRM/E and CWM cables. This model provides water-resistant cable entry and corrosion-resistant wiring enclosure. A pipe strap (PS Series) is required to attach this model to a pipe. Small pipe adapter is available for pipe size less than 1-1/2".

Kit Dimensions: 7"H x 3.25"W x 3.25"D

Kit Includes:
1 Pipe standoff
1 Self-regulating cable grommet
1 Constant wattage cable grommet
1 RED Universal Voltage 120-277V LED Light Assembly
2 Insulated parallel splices

UESL-G GREEN End Seal Signal Light Kit
PCN 394353
NEMA 4X rated end seal designed to power or seal one cable and indicate power on with GREEN universal voltage 120-277V LED indicator light kit designed for use with SRL, SRP, SRM/E and CWM cables. This model provides water-resistant cable entry and corrosion-resistant wiring enclosure. A pipe strap (PS Series) is required to attach this model to a pipe. Small pipe adapter is available for pipe size less than 1-1/2".

Kit Dimensions: 7"H x 3.25"W x 3.25"D

Kit Includes:
1 Pipe standoff
1 Self-regulating cable grommet
1 Constant wattage cable grommet
1 GREEN Universal Voltage 120-277V LED Light Assembly
2 Insulated parallel splices

UAS Ambient-Sensing Thermostat*
PCN 394038
NEMA 4X rated junction box designed to connect a single SRL, SRP, SRM/E or CWM cable run to power and control cable output via ambient air temperature in non-hazardous areas. This kit provides water-resistant cable entry for one cable, enclosure support, terminal block and a water resistant corrosion resistant wiring enclosure with a 3/4" opening to accept a conduit hub (CCH-2 or equal). Stainless steel sheath probe is 9/16" diameter x 3" long. Switch rated for 22 amps SPDT 120-480 volts. Operating temperature range is -40°F to 160°F (-40°C to 71°C). Temperature set point 0° to 225°F (-81°C to 107°C) with 10°F scale divisions.

*Only for ordinary areas.

Kit Dimensions: 9.78"H x 8.69"W x 3.6"D

Kit Includes:
1 Junction box with DIN rail & terminal block
1 Compression fitting
1 Locknut
1 Silicone termination boot
1 Pipe standoff
1 O-ring
1 Self-regulating cable grommet
1 Constant wattage cable grommet
U Series
Heat Trace Connection Kits/Accessories (cont’d.)

USL Signal Light Kit*
PCN 393588
NEMA 4X rated end seal designed to power or seal one cable and indicate power on with universal voltage 120-277 LED indicator light kit designed for use with SRL, SRP, SRM/E and CWM cables. This model provides water-resistant cable entry, enclosure support, terminal block, and corrosion-resistant wiring enclosure. A pipe strap (PS Series) is required to attach this model to a pipe. Small pipe adapter is available for pipe size less than 1-1/2”.

* Only Approved for Ordinary Areas.

Kit Dimensions: 9.78”H x 4.78”W x 3.6”D
Kit Includes:
1 Junction box with DIN rail & terminal block
1 Compression fitting
1 Locknut
1 Silicone termination boot
1 Pipe standoff
1 O-ring
1 Self-regulating cable grommet
1 Constant wattage cable grommet
1 Universal voltage 120-277V LED light assy.

UBC Line-Sensing Thermostat*
PCN 394011
NEMA 4X rated junction box designed to connect a single SRL, SRP, SRM/E or CWM cable run to power and control cable output via pipe temperature in non-hazardous areas. This kit provides water-resistant cable entry for one cable, enclosure support, terminal block and a water resistant corrosion resistant wiring enclosure with a 3/4” opening to accept a conduit hub (CCH-2 or equal). Stainless steel bulb is 1/4” diameter x 7-1/4” long with 3ft capillary. Switch rated for 22 amps SPDT 120-480 volts. Operating temperature range is -40°F to 160°F (-40°C to 71°C). Temperature set point 0° to 400°F (-18°C to 200°C) with 10°F.

* Only approved for ordinary areas.

Kit Dimensions: 9.78”H x 8.69”W x 3.6”D
Kit Includes:
1 Junction box with DIN rail & terminal block
1 Compression fitting
1 Locknut
1 Silicone termination boot
1 Pipe standoff
1 O-ring
1 Self-regulating cable grommet
1 Constant wattage cable grommet
1 Line-sensing thermostat assembly

AT-1 Aluminum Tape Cable Attachments
PCN 383355
180’ roll aluminum foil installation tape with pressure sensitive acrylic adhesive. 2-mil thickness with high tensile strength; 2-1/2” wide. 200°F (93°C) rating. Minimum application temperatures 40°F (5°C).
HEATING CABLE

U Series
Heat Trace Connection Kits/Accessories (cont’d.)

FT-3 Fiberglass Tape Cable Attachments
PCN 389941

66’ roll glass cloth installation tape with pressure sensitive thermosetting adhesive. 3/8” wide. 500°F (260°C) rating. Strap at one foot intervals. Minimum application temperature 40°F (5°C).

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<tr>
<th>Tape Type</th>
<th>Rolls Needed per 100’ of Pipe</th>
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<td>Pipe Dia. (In.)</td>
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PS-1, PS-3, PS-10 Stainless Steel Pipe Straps
PCN 382352, 382360, 382379

Used for attaching U Series kits to pipe.
PS-1 1/2” to 3/4” pipes (PCN 382352)
PS-3 1” to 3-1/2” pipes (PCN 382360)
PS-10 2-1/2” to 9” pipes (PCN 382379)
PS-20 9” to 19.5” pipes (PCN 382256)

Stripping Tool
PCN 393510

Tool for stripping the base jacket and the conductive matrix from the cable buss wires. The tool is stocked with 16 awg blades for stripping SRL, HSRL, SRM/E, HSRM and SRP and Thermwire products.

Replacement Blades
PCN 393537
Blade Set for Stripping SRL, HSRL, SRM/E, HSRM and SRP Cables

Conduit Hub w/Grounding Lug
CCH-2 (385650)

Corrosion resistant hub for 3/4” conduit. Fits opening in PJB, DL, U Series and DTS. Includes ground connector.
U Series
Long Line Heat Trace Connection Accessories

Power Connection Kit
- NEMA 4X
- Entry for 1 Cable
- 3/4” Conduit Hub Opening
- Mounts Above Insulation for Easy Access

Splice Connection Kit
- NEMA 4X
- Entry for 2 Cables
- 3/4” Conduit Hub Opening
- Mounts Above Insulation for Easy Access

End Seal Connection Kit
- NEMA 4X
- Entry for 1 cable
- Mounts Above Insulation for Easy Access

Description
The Chromalox Long Line Heat Trace Connection Accessories are used to provide electrical connection to SLL heat trace cables. These kits contain specialty parts and must be used to ensure proper functioning of the SLL cable, compliance with warranty, code, and approval requirements. All connections kits use a NEMA 4X enclosure and provide all materials in a convenient, easy to use economical package.

Features
- Molded of Durable Polyphenylene Sulphide Plastic Material*
- Maximum Pipe Temperature 482°F (250°C)
- Corrosion Resistant
- Thermal Stability
- Non-Flammable
- High Strength and Rigidity
- Captive Hardware
- Stainless Steel Hardware to Ensure the Integrity of the System
- Liquid Tight Design Prevents Moisture from Reaching the Electrical Connections
- All Models are Rated NEMA 4X

Applications
These accessories are designed to connect SLL heating cables to customer supplied wiring in any of the following applications:
- Freeze Protection
- Piping Process Temperature Maintenance
- Fluid Flow and Viscosity Maintenance

Approvals
CSA Approved:
- Class I, Div. 2 Groups B, C, D (gases, vapors)
- Class II, Div. 2 Groups E, F, G (combustible dust)
- Class III (easily ignitable fibers and fillings)
- Temperature Coded per Design. Contact Chromalox Sales

* This crystalline, high-performance engineering TP is characterized by outstanding high temperature stability, inherent flame resistance and a broad range of chemical resistance. PPS plastics and compounds provide various combinations of high mechanical strength, impact resistance and electrical insulation, with its high arc resistance and low arc tracking.
U Series
Long Line Heat Trace Connection
Accessories
(cont’d.)

Accessories

UPC-LL Power Connection Kit
PCN 394302

NEMA 4X rated junction box designed to connect SLL heating cables to customer supplied power wiring. This kit provides water-resistant cable entry for one cable, enclosure support, crimp connections, cold leads, and a water-resistant corrosion-resistant wiring enclosure with an opening to accept a 3/4” conduit hub. A pipe strap (PS series) is required to attach this model to a pipe.

Kit Dimensions: 9.78”H x 8.69”W x 3.6”D

Kit Includes:
1 Junction Box
1 Pipe Standoff
1 Locknut
1 Compression Fitting
1 O-Ring
1 Grommet
6 Cold Leads (12 AWG & 4 AWG)
9 Crimps
4 Tape Strips
2 Solder

UMC-LL Splice Connection Kit
PCN 394310

NEMA 4X rated junction box designed to connect two SLL heating cables to each other. This kit provides water-resistant cable entry for one cable, enclosure support, crimp connections, and a water-resistant corrosion-resistant wiring enclosure with an opening to accept a 3/4” conduit hub. A pipe strap (PS series) is required to attach this model to a pipe.

Kit Dimensions: 9.78”H x 8.69”W x 3.6”D

Kit Includes:
1 Junction Box
1 Pipe Standoff
1 Locknut
1 Compression Fitting
1 O-Ring
1 Grommet
1 Brass Locknut
1 Conduit Plug
9 Crimps
4 Tape Strips
2 Solder
UES-LL End Seal Connection Kit
PCN 394329

NEMA 4X rated junction box designed to terminate SLL heating cables outside of the insulation. This kit provides water-resistant cable entry for one cable, enclosure support, crimp connections, and a water-resistant corrosion-resistant wiring enclosure with an opening to accept a 3/4" conduit hub. A pipe strap (PS series) is required to attach this model to a pipe.

**Kit Dimensions:** 9.78"H x 8.69"W x 3.6"D

**Kit Includes:**
1. Pipe Standoff
1. Locknut
1. Compression Fitting
1. O-Ring
1. Grommet
1. Brass Locknut
1. Conduit Plug
9. Crimps
4. Tape Strips
2. Solder