

# Heating Cable

## DL & EL Series Connection Accessories

### DL Series

- Re-usable Components
- Through-the-Insulation Mounting Provides High Visibility
- Easy Access for Maintenance

### EL Series

- Low Profile Provides Easy Installation of Insulation
- Contains Standard, Off-the-Shelf Electrical Connection Components



**RTPC**



**RTST**



**RTES**



### Ordering Information

DL Accessories		EL Accessories	
Model	Used With	Model	Used With
<b>Power Connection Kit</b>			
RTPC RTPC-SL	SRL-C SRL-CR, CT SRP-C, SRP-CT CWM-C CWM-CT SRL-MC SRL-MCR, MCT SRM/E-C SRM/E-CT	SSK PJB RG-PK-1	SRL-C, SRL-CR, SRL-CT, SRF-C, CWM-C, CWM-CT SRF-RG SRP-C, SRP-CT HWM
<b>Splice &amp; Tee Kit</b>			
RTST RTST-SL	SRL-C SRL-CR, CT SRP-C, SRP-CT CWM-C CWM-CT SRL-MC SRL-MCR, MCT SRM/E-C SRM/E-CT	RT-RST RT-TST RG-SK-1	SRL-C, SRL-CR, SRF-C CWM-C, CWM-CT SRF-RG, SRP-C SRP-CT
<b>End Seal Kit</b>			
RTES	SRL-C SRL-CR, CT SRP-C, SRP-CT CWM-C CWM-CT SRL-MC SRL-MCR, MCT SRM/E-C SRM/E-CT	RT-RES RG-EK-1	SRL-C, SRL-CR, SRF-C SRF-RG
<b>To Order — Refer to the DL &amp; EL General Application Accessories in this section.</b>			

Chromalox offers cable termination kits in DL for high profile, through-the-insulation styles and EL for low profile, under-the-insulation. Both styles are approved for hazardous area applications.

### Attachment Accessories

Model	Description
FT-3	Fiberglas® tape to affix cable to pipe
AT-1	Aluminum tape to improve heat transfer to pipe
PS-1	Stainless Steel Pipe strap to mount power connection box to pipe, 1/2 - 3/4" pipes
PS-3	Stainless Steel Pipe strap to mount power connection box to pipe, 1 - 3-1/2" pipes
PS-10	Stainless Steel Pipe strap to mount power connection box to pipe, 2-1/2 - 9" pipes
PS-20	Stainless Steel Pipe strap to mount power connection box to pipe, 9" - 19.5" pipes
CL-1	Caution labels, apply every 10 feet to insulation to alert personnel
<b>To Order — Refer to the DL &amp; EL General Application Accessories in this section.</b>	

## DL Integrated Connection Accessories



- **Power Connection Box**
  - NEMA 4X Enclosure
  - Cable Entry Up to 3 Cables
  - 3/4" Conduit Hub Opening
- **Splice & Tee Box**
  - NEMA 4X Enclosure
  - Cable Entry Up to 3 Cables
  - Straight or Tee Connections
- **End Seal Fitting**
  - NEMA 4X Enclosure
  - Fits All Pipe Sizes
  - Mounting Feet for Installing on Flat Surfaces
- **Stainless Steel Hardware**
- **Corrosion & Weather Resistant Ryton® Construction**

### RTPC



### RTST



### RTES



### Description

The DL Series Installation Accessories for Chromalox heat tracing products represents the state of the art in heat tracing. Each model in the series is designed to satisfy the demands of a particular operation. These high-quality models combine a variety of functions in a convenient, easy to use and economical package.

### Applications

Connection of all Rapid Trace Heating Cables to Customer Supplied Power Wiring in any of the following applications:

- Hydrocarbon and Chemical Product Piping
- Process Temperature Maintenance
- Fluid Flow and Viscosity Maintenance
- Freeze Protection.

### Features

- Molded of Durable Plastic Material (Ryton®, PPS)<sup>1</sup>
- High Service Temperature
- Corrosion Resistant
- Integrated Connection Accessories and Controls
- Thermal Stability

- Non-Flammable
- High Strength and Rigidity
- 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.

### Approvals<sup>2</sup>

**UL, CSA, FM** Approved for most models, consult specific product information.

**UL** Listed for ordinary areas

- CSA** Certified for ordinary and:
- Class I, Div. 2, Groups A, B, C, D
  - Class II, Div. 2, Groups E, F, G

- FM** Approved for ordinary and:
- Class I, Div. 2, Groups B, C, D
  - Class II, Div. 2, Groups E, F
  - Class III, Div. 2 Areas.

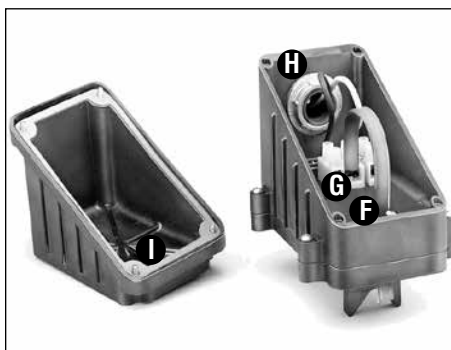
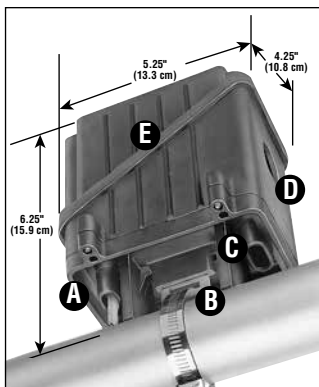
### Notes —

1. Ryton®, is a registered trade name of Phillips Chemical Company.
2. Depends on specific model and cable applied.

## DL Integrated Connection Accessories (cont'd.)

### RTPC — Power Connection Kit

**RTPC** Power Connection Box is a NEMA 4X rated junction box designed to connect all Chromalox Rapid Trace Heating Cables to customer supplied power wiring. This kit provides waterproof cable entry for up to three cables, enclosure support, terminal block and a waterproof, corrosion resistant wiring enclosure with an opening to accept a 3/4" conduit hub (Chromalox CCH-2 or equal). A pipe strap (Chromalox PS or equal) is required to attach this model to a pipe.



### RTPC — Power Connection Kit

- 1 molded junction box consisting of:
  - 1 base
  - 1 box w/conduit opening
  - 1 lid
- 1 three position terminal block
- 1 mounting screw for terminal block
- 1 GRSR self-regulating cable sealing grommet
- 1 GRCW constant wattage sealing grommet

### Ordering Information — RTPC

Model	PCN	Stock	Wt. (Lbs.)
RTPC	389554	S	1
RTPC-SL1	389626	S	2
RTPC-SL2	389634	S	2
RTPC-SL3	389642	S	2

### Construction

- A** Three strategically placed cable entries allow maximum flexibility for insulation (Heating cable cut away for clarity).
- B** Stainless steel tiedown support provides positive attachment to pipes.<sup>1</sup>
- C** Heavy duty support legs give stable pipe mounting and provide conduit clearance for applications with up to three inches of insulation.
- D** Opening for 3/4" (20 mm) conduit hub.<sup>1</sup>
- E** Oblique sided box and cover allow easy access for wiring.
- F** Cable grommets provide water-tight seal between base, box and cable. Use GRSR with all self-regulating cable. Use GRCW for constant wattage cables. One of each grommet included in kit. See table below for spare grommets.
- G** Three position terminal block for easy wiring.
- H** Power wiring entry. Conduit hub not included.<sup>1</sup>
- I** Gasket provides water-tight seal between box and lid. It is affixed to the lid and holds the mounting hardware during assembly.

**Note 1** — Refer to DL & EL General Application Accessories at the end of this section.

### RTPC-SL — Power Connection Kit w/Signal Light (Ordinary Area Only)

- 1 molded junction box consisting of:
  - 1 base
  - 1 box w/conduit opening
  - 1 lid w/signal light installed (LED style)
    - Specify: SL1(120V), SL2(208-240V), SL3(277V) operation
- 1 three position terminal block
- 1 mounting screw for terminal block
- 1 GRSR self-regulating cable sealing grommet
- 1 GRCW constant wattage sealing grommet

### Spare Grommets

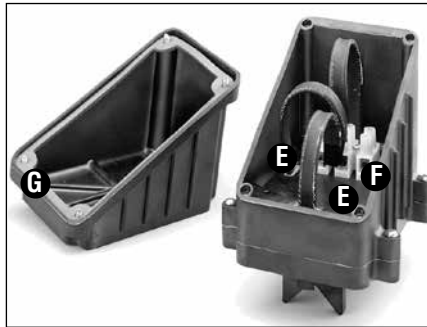
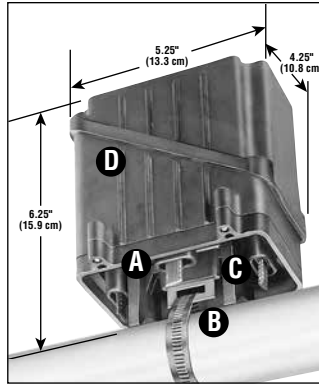
Grommet Type	PCN
GRS RTD/Capillary type	385000
GRO Blank	385019
GRSR Self Regulating type	389714
GRCW Constant Wattage type	389722

## DL

### Integrated Connection Accessories *(cont'd.)*

#### *RTST — Splice & Tee Kit*

**RTST** Splice & Tee Box is a NEMA 4X rated junction box designed to make straight or tee splices for all Chromalox Rapid Trace Heating Cables. This model provides waterproof cable entry (for two cables for a splice or three cables for a tee), enclosure support, terminal block and a waterproof, corrosion resistant wiring enclosure. A pipe strap (Chromalox PS or equal) is required to attach this model to a pipe.



#### *RTST — Splice & Tee Kit*

- 1 molded junction box consisting of:
  - 1 base
  - 1 box
  - 1 lid
- 1 three position terminal block
- 1 mounting screw for terminal block
- 3 GRSR Self-regulating cable sealing grommet
- 3 GRCW Constant wattage sealing grommets

#### *Ordering Information — RTPC*

Model	PCN	Stock	Wt. (Lbs.)
RTST	389562	S	1
RTST-SL1	389650	S	2
RTST-SL2	389669	S	2
RTST-SL3	389677	S	2

#### *Construction*

- A** Three strategically placed cable entries allow maximum flexibility for insulation (heating cable cut away for clarity).
- B** Stainless steel tiedown support provides positive attachment to pipes.<sup>1</sup>
- C** Heavy duty support legs give stable pipe mounting and provide conduit clearance for applications with up to three inches of insulation.
- D** Oblique sided box and cover allow easy access for wiring.
- E** Cable grommets provide water-tight seal between base, box and cable. Use GRSR with all self-regulating cable. Use GRCW for constant wattage cables. Three of each grommet included in kit. See table below for spare grommets.
- F** Three position terminal block for easy wiring.
- G** Gasket provides water-tight seal between box and lid. It is affixed to the lid and holds the mounting hardware during assembly.

**Note 1** — Refer to DL & EL General Application Accessories at the end of this section.

#### *RTST-SL — Splice & Tee Kit w/Signal Light (Ordinary Area Only)*

- 1 molded junction box consisting of:
  - 1 base
  - 1 box
  - 1 lid *w/signal light installed (LED style)*  
Specify: SL1 for 120 Volt, SL2 for 208-240 Volt, SL3 for 277 Volt operation
- 1 three position terminal block
- 1 mounting screw for terminal block
- 1 GRSR Self-regulating cable sealing grommet
- 1 GRCW Constant wattage sealing grommet

#### *Spare Grommets PCN*

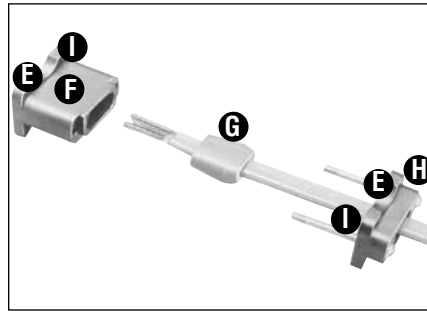
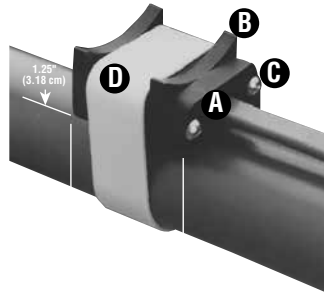
<b>GRS</b>	RTD/Capillary type	<b>385000</b>
<b>GRO</b>	Blank	<b>385019</b>
<b>GRSR</b>	Self Regulating type	<b>389714</b>
<b>GRCW</b>	Constant Wattage type	<b>389722</b>

## DL

### Integrated Connection Accessories (*cont'd.*)

#### RTES — End Seal Kit

**RTES** End Seal Fitting is a NEMA 4X rated enclosure designed to terminate all Chromalox Rapid Trace Heating Cables. This model provides waterproof cable entry for one cable, enclosure support and a waterproof 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. In addition, this side also has four "feet" for installation on flat surfaces.



#### RTES — End Seal Kit

- 1 end cap
- 1 pressure plate
- 1 GRSR Self-regulating cable sealing grommet
- 1 GRCW Constant wattage cable sealing grommet

#### Construction

- A** Cable entry.
- B** Three inch diameter curved mounting surface.
- C** Captured stainless steel hardware.
- D** One inch wide strapping channel for secure mounting.
- E** One-half inch radius curved mounting surface.
- F** End cap.
- G** Cable grommet provides water-tight seal between end cap and pressure plate. Use GRSR with all self-regulating cables. Use GRCW with constant wattage cables. One of each grommet included in kit. See table below for spare grommets.
- H** Pressure plate.
- I** Mounting feet for installation on flat surfaces.

#### Ordering Information — RTES

Model	PCN	Stock	Wt. (Lbs.)
RTES	389570	S	1

#### DL Accessory Components

##### MP-1 (385780)



#### Mounting Plate Kit Attachments

- For installing RTPC and RTST kits on flat surfaces. Kit includes:
- 1 mounting plate
  - 1 lock washer
  - 1 bolt
  - 1 washer
  - 1 nut

**Note** — The complete line of DL & EL Mounting Accessories is located at the end of this section.

#### Spare Grommets

#### PCN

<b>GRS</b>	RTD/Capillary type	<b>385000</b>
<b>GRO</b>	Blank	<b>385019</b>
<b>GRSR</b>	Self-Regulating type	<b>389714</b>
<b>GRCW</b>	Constant wattage type	<b>389722</b>

## EL

### Standard Connection Accessories

- Junction Box Connection Kits for SRL, SRF and CWM Applications
- Splice & Tee Kits for SRL, SRF and CWM Applications
- End Seal Kits for SRL and SRF Applications



#### Description

Each model in the EL Series Installation Accessories for Chromalox Rapid Trace Heating Cable products is designed to satisfy the demands of a particular operation. These high-quality models combine a variety of functions in a convenient, easy to use and economical package.

#### Applications

Connection of selected rapid trace heating cables to customer supplied power wiring in any of the following applications:

- Freeze Protection
- Hydrocarbon and Chemical Product Piping
- Process Temperature Maintenance
- Fluid Flow and Viscosity Maintenance.

#### Approvals

- UL\*** Listed for ordinary areas
- CSA\*** Certified for ordinary areas
- FM\*\*** Approved for ordinary areas

- \* Does not include SSK
- \*\* Does not include SSK and PJB

#### Ordering Information

Model	Used With
<b>Power Connection Kit</b>	
SSK PJB	SRF-C, SRF-CR, SRL-C, SRL-CR, SRL-CT, CWM-C, CWM-CT, SRP-C, SRP-CT
<b>Splice &amp; Tee Kit</b>	
RT-RST RT-TST	SRL-C, SRL-CR, SRF-C CWM-C, CT, SRP-C, SRP-CT
<b>End Seal Kit</b>	
RT-RES	SRL-C, SRL-CR, SRF-C
<b>To Order</b> — Refer to the DL & EL General Application Accessories in this section.	

ACCESSORIES AND CONTROLS

## EL

### Standard Connection Accessories (*cont'd.*)

#### Accessories



#### **Junction Box Connection Kit SSK (393617)**

- (1) compression fitting
- (1) pipe stand off
- (1) tube of RTV sealant
- (1) O-ring
- (1) 1" locknut
- (1) self-regulating cable grommet
- (1) constant wattage cable grommet
- (1) silicone boot
- (2) uninsulated barrel connectors
- (2) insulated barrel connectors



#### **Caution Labels CL-1 (382424)**

- (5) electric heat tracing caution labels, weather resistant



#### **Rain Tight Junction Box PJB (393676)**

Polycarbonate watertight enclosure for use with SSK



#### **Splice & Tee Kit (for Constant Wattage and SRM/E Cable) RT-TST (383566)**

- (5) 7" long large heat shrink tubes
- (10) 1-1/2" long small heat shrink tubes
- (5) 10" lengths of sealant tape
- (15) uninsulated barrel connectors
- (1) tube of RTV sealant



#### **End Seal Kit (for SRL cable) RT-RES (383574)**

- (5) 1/2" diameter heat shrink caps



#### **Splice & Tee Kit (for SRL cable) RT-RST (383558)**

- (5) 8" long heat shrink tubes
- (5) 1/2" lengths of sealant tape
- (10) insulated barrel connectors
- (5) uninsulated barrel connectors



#### **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.

## DL & EL Series General Application Accessories

### Accessories



**Conduit Hub  
Cable Attachments  
CCH-2 (385650)**

Corrosion resistant for 3/4" conduit. Fits opening in PJB, DL, U Series and DTS. Includes a ground connector.



**Fiberglass® Tape  
Cable Attachments  
FT-3 (389941)**

66 foot roll glass cloth tape with pressure-sensitive thermosetting silicone adhesive 3/8" wide. 310°F (155°C) rating. Strap at one foot intervals at minimum application temperatures of -40°F (-40°C).



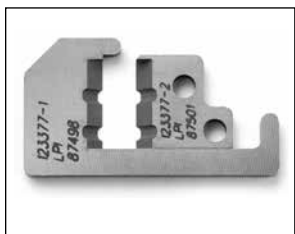
**Aluminum Tape  
Cable Attachments  
AT-1 (383355)**

180 foot 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).



**Cable Stripping Tool  
w/16 awg Blades ST-1 (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**

Blades for use with the Cable Stripping Tool. 16 awg blades for SRL, HSRL, SRM/E, HSRM, SRP, SRF and Thermwire products.



**Stainless Steel Pipe Strap Kit  
Attachments  
PS-1, 3, 10 & 20**

**PS-1 (382352)** 1/2 to 3/4" pipes  
**PS-3 (382360)** 1 to 3-1/2" pipes  
**PS-10 (382379)** 2-1/2 to 9" pipes  
**PS-20 (382256)** 9" to 19.5" pipes



**Caution Labels  
CL-1 (382424)**

5 electric heat tracing caution labels, weather resistant.

### Ordering Information — Cable Attachments

Description	Model	PCN	Stock	Wt. (Lbs.)
Fiberglass® Tape	FT-3	389941	S	1
Aluminum Tape	AT-1	383355	S	2
Stainless Steel Pipe Strap Kit	PS-1	382352	S	1
	PS-3	382360	S	1
	PS-10	382379	S	1
	PS-20	382256	S	1
Caution Labels	CL-1	382424	S	1
Cable Stripping Tool with 16 awg blades	ST-1	393510	S	1
16 awg Replacement Blades	BL-2	393537	S	1

To Order – Specify model, PCN and quantity.

Tape Type	Rolls Needed per 100' of Pipe								
	Pipe Dia. (In.)								
	1/2"	1	2	3	4	6	8	10	12
FT-3	1	2	4	4	6	8	10	12	15