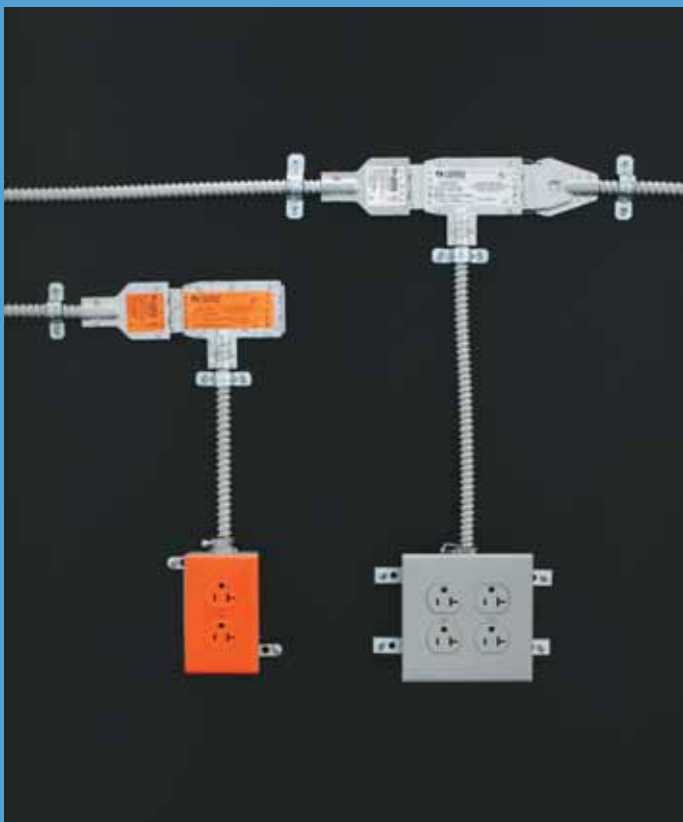




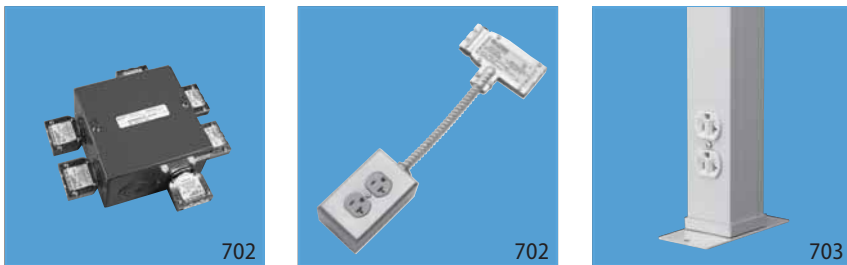
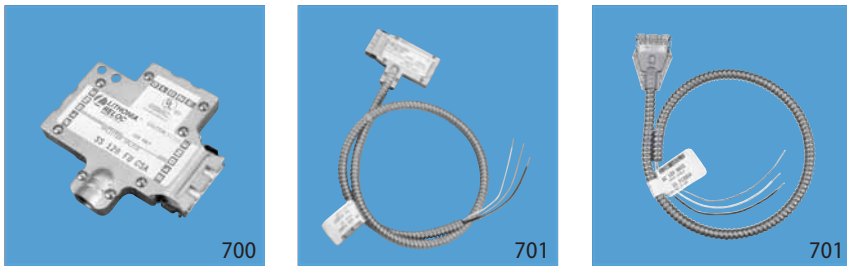
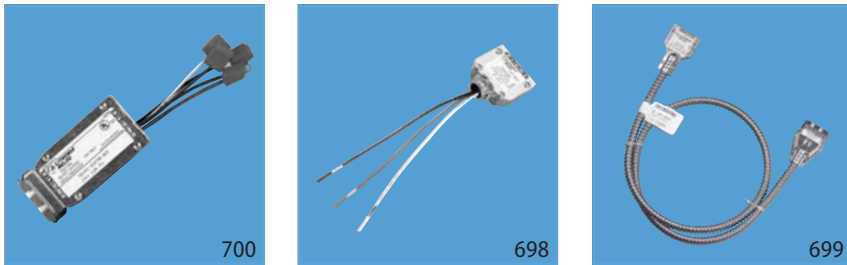
## Reloc® Wiring Systems

The leader in modular wiring for more than 20 years, Reloc® wiring systems offer unique wiring systems for commercial, industrial and specialty applications that are fast, easy and effective.

In today's fast-track market, every job demands wiring solutions that reduce installation time and adapt to changes that occur both during and after construction. Reloc® systems give you the edge you need to stay on schedule and on budget.



# CONTENTS



## Recessed Ceiling Lighting Systems

Quick-Flex® 684

## Open Ceiling Lighting Systems

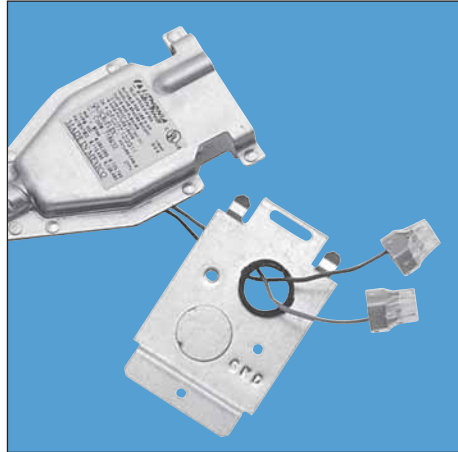
OnePass® 690

## Specialty Lighting and Power Systems

Power Wiring 695  
 Specialty Lighting 695  
 Power Pole 703

The Quick-Flex® System

# Quick-Flex®



### Intended Use

The Quick-Flex® system costs less than other wiring methods for commercial lighting in offices, schools and other accessible ceiling applications. Quick-Flex® systems are simple and utilize components that snap together in a fraction of the time required for MC cable or other traditional wiring methods.

### Features

Pin-and-socket contacts. Rated for use on 20-amp branch circuits.

All conductors are No. 12 AWG copper with 90°C thermoplastic insulation rated at 600 volts.

Component provides a fully rated No. 12 AWG grounding conductor.

Fixture leads are No. 18 AWG solid copper rated at 105°C with pushnut connectors for easy connection to ballast leads; wirenuts not required.

Lithonia access plate is included with the QFC and QSFC cables. The access plate can be snapped into place or discarded if not required. No fixture ground lead to connect. UL listed auto grounding feature eliminates the need for ground wire connection on each fixture.

Safety keying prevents accidental mating of components of different voltages and reverse polarity. Color-coded labels for quick voltage identification. Suitable for make or break under load.

Autolatching springs for easy male/female connections.

Quick-Flex® is manufactured from listed MC cable.

### Listings

UL Listed to US and Canadian safety standards.

Caution: This product is not intended for installation in outdoor, damp or humid locations. Please consult with factory for use in any classified areas.

Factory-Installed Fluorescent Combo

# Quick-Flex®

### Intended Use

The Reloc® combo option provides the Quick-Flex® fixture cable pre-wired to a Lithonia fixture at the factory.

### Ordering Information

Example: **2PM3N G B 3 32 18LD MVOLT 1/3 GEB**

**QFC277 12/2G11A**

The voltage for the QFC must be specified when ordered with a multi-volt ballast fixture. All Quick-Flex® products are voltage specific. The wiring instruction also must be included in the QFC description.

The QFC is prewired to the fixture and is easily snapped into place during the fixture installation.

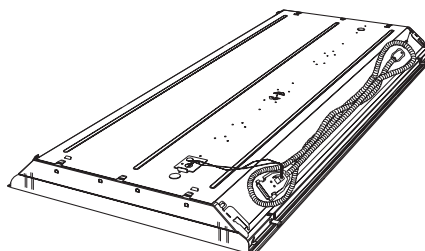
Dust covers are not included with the fluorescent combo option.

If extra dust covers are needed, they must be ordered separately: **QUICKFLEX DUST COVER J50**.

When ordered as a separate item, the dust covers will come in packs of 50 only. Orders must be entered in multiples of 50.

Combo Factory Wiring Instructions

Wiring Instruction Indicator	Wiring Description
<b>A</b>	All normal ballast(s) wired to hot 1.
<b>B</b>	All normal ballast(s) wired to hot 2 (12/3G cable only).
<b>AB</b>	All normal ballast(s) wired to hot 1 and hot 2 (12/3G cable only).
<b>AE</b>	All normal ballast(s) connect to hot 1; EL inverter connects to hot 2 (12/3G cable only).
<b>NW</b>	Cable packaged with fixture, not wired.



[www.lithonia.com](http://www.lithonia.com), keyword: QF

Intended Use

Provides the interface between hardwiring and the Quick-Flex® system at the homerun location.

Conventional wiring methods bring power from the panel to the homerun location or above.

**QC**

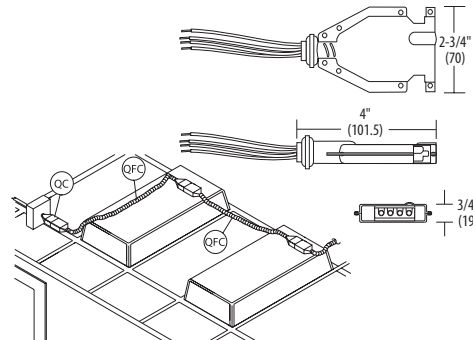
Quick-Flex® Converter

Ordering Information

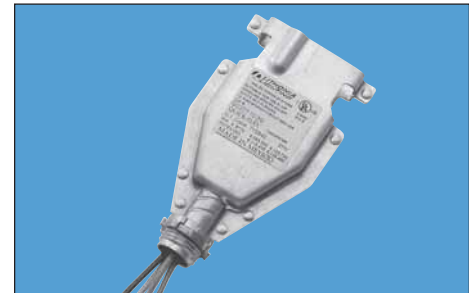
Example: **QC277 12/3G**

Family	Voltage	Size and number of conductors	Length
<b>QC</b>	<b>120</b>	<b>12/3G</b> Three 12 AWG conductors plus one 12 AWG ground	(blank) 6" leads
	<b>277</b>		<b>09</b>
	<b>347</b>		<b>15</b>

Voltage Wire Color and Position			
Pin Position #	Pin Function	120V	277V & 347V
1	Hot 1	Black	Brown
2	N	White	White
3	G	Green <sup>1</sup>	Green <sup>1</sup>
4	Hot 2	Red	Orange



Dimensions are shown in inches (millimeters).



**lightquick<sup>®</sup> XD**  
Express delivery products.

See page 11 for details about LightQuick XD.

Description

- QC120 12/3G M10**
- QC277 12/3G M10**

NOTES:

Three Quick-Flex® dust covers are included for every 10 pieces ordered.

Intended Use

Male/female cable that provides power from fixture to fixture in the Quick-Flex® system.

Features

Access plate is preattached (standard) to QFC to provide quick, easy fixture installation. The access plate is not fully engaged to the fixture spring.

**QFC**

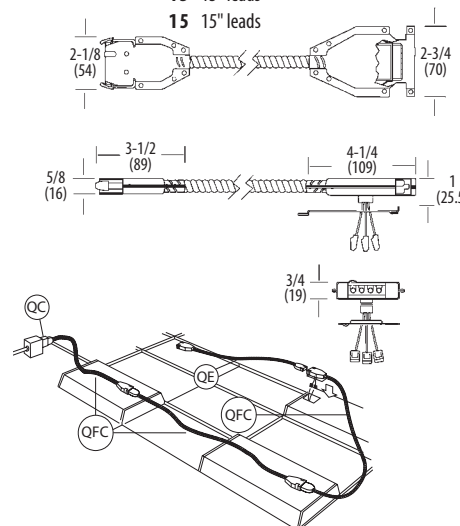
Quick-Flex® Fixture Cable

Ordering Information

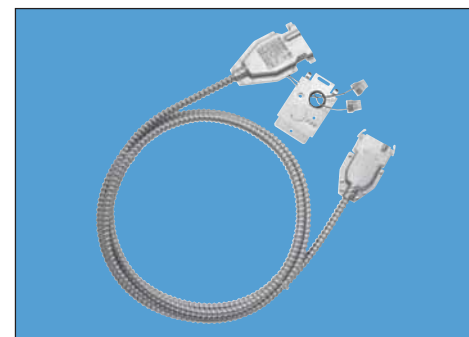
Example: **QFC277 12/3G11**

Family	Voltage	Size and number of conductors	Length	Optional ground lead <sup>1,2</sup>
<b>QFC</b>	<b>120</b>	<b>12/2G</b> Two 12 AWG conductors plus one 12 AWG ground <b>12/3G</b> Three 12 AWG conductors plus one 12 AWG ground	<b>07</b> 7" leads	<b>G</b> 18 AWG round lead dropped to fixture
	<b>277</b>		<b>09</b> 9" leads	
	<b>347</b>		<b>11</b> 11" leads	
	<b>13</b> 13" leads			
	<b>15</b> 15" leads			

Voltage Wire Color and Position			
Pin Position #	Pin Function	120V	277V & 347V
1	Hot 1	Black	Brown
2	N	White	White
3	G	Green <sup>1</sup>	Green <sup>1</sup>
4	Hot 2	Red	Orange



Dimensions are shown in inches (millimeters).



**lightquick<sup>®</sup> XD**  
Express delivery products.

See page 11 for details about LightQuick XD.

Description

- QFC277 12/3G15 M5**
- QFC277 12/3G11 M10**
- QFC277 12/2G15 M5**
- QFC277 12/2G11 M10**
- QFC120 12/3G15 M5**
- QFC120 12/3G11 M10**
- QFC120 12/2G15 M5**
- QFC120 12/2G11 M10**

NOTES:

- <sup>1</sup> UL Listed for auto ground. Use G option only when required by local codes.
- <sup>2</sup> G option is required in Canada.

Three Quick-Flex® dust covers are included for every 10 pieces ordered.

Dust covers are not included with factory combo option. See page 684 for combo wiring and ordering instructions.

Recessed Ceiling Lighting Systems

# QE

## Quick-Flex® Extender Cable



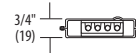
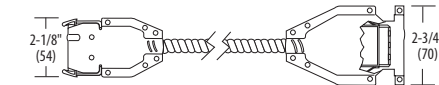
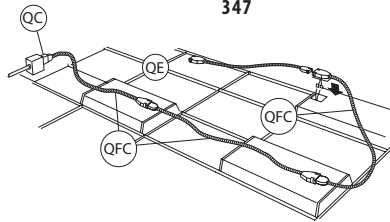
### Intended Use

Male/female cable that provides additional length anywhere in the Quick-Flex® system.

### Ordering Information

Example: **QE277 12/3G15**

Family	Voltage	Size and number of conductors	Length
<b>QE</b>	<b>120</b>	<b>12/2G</b> Two 12 AWG conductors plus one 12 AWG ground	<b>05</b>
	<b>277</b>	<b>12/3G</b> Three 12 AWG conductors plus one 12 AWG ground	<b>09</b>
	<b>347</b>		<b>11</b>
			<b>15</b>
			<b>21</b>



Dimensions are shown in inches (millimeters).

NOTES:  
Three Quick-Flex® dust covers are included for every 10 pieces ordered.

**lightquick® XD**  
Express delivery products.

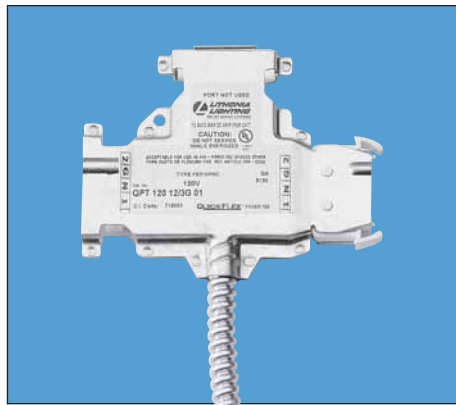
See page 11 for details about LightQuick XD.

#### Description

**QE277 12/3G15 M5**  
**QE120 12/3G15 M5**

# QPT

## Quick-Flex® Power Tee



### Intended Use

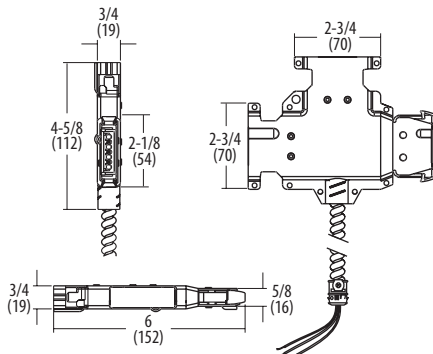
Carries power with the use of the Quick-Flex® extender (QE). Ideal for powering downlighting, under-floor systems, track light feeds, exit signs,

unit equipment and power receptacles. Can be used in place of two existing products, the Quick-Flex® splitter (QS) and drop (QD).

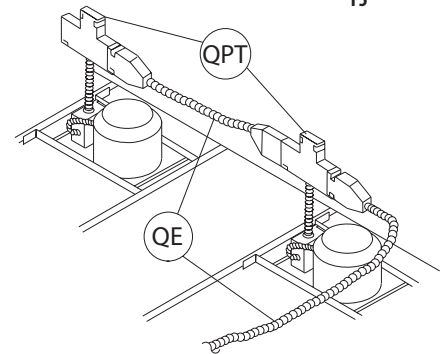
### Ordering Information

Example: **QPT277 12/3G01**

Family	Voltage	Size and number of conductors	Length
<b>QPT<sup>1</sup></b>	<b>120</b>	<b>12/3G</b> Three 12 AWG conductors plus one 12 AWG ground	<b>01</b>
	<b>277</b>		<b>09</b>
	<b>347</b>		<b>15</b>



Dimensions are shown in inches (millimeters).



NOTES:  
Top port not used on standard product. Consult factory for integrated splitter option.

Three Quick-Flex® dust covers are included for every 10 pieces ordered.

Voltage Wire Color and Position			
Pin Position #	Pin Function	120V	277V & 347V
1	Hot 1	Black	Brown
2	N	White	White
3	G	Green <sup>1</sup>	Green <sup>1</sup>
4	Hot 2	Red	Orange

www.lithonia.com, keywords: QE and QPT



Intended Use

Combination of converter (QC) and fixture cable (QFC). Wires directly into homerun junction box,

switch box or junction box above switch location; provides power to first fixture from that location.

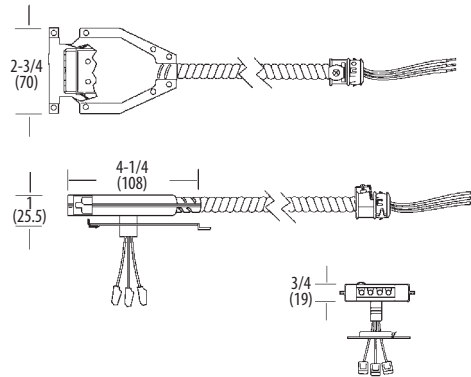
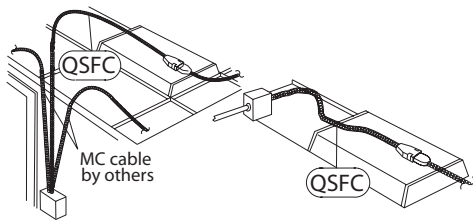
# QSFC

## Quick-Flex® Starter Fixture Cable

Ordering Information

Example: **QSFC277 12/3G15**

Family	Voltage	Size and number of conductors	Length	Optional ground lead <sup>1,2</sup>
QSFC	120	<b>12/2G</b> Two 12AWG conductors plus one 12AWG ground	<b>09</b>	<b>G</b> 18 AWG round lead dropped to fixture
	277	<b>12/3G</b> Three 12AWG conductors plus one 12AWG ground	<b>11</b>	
	347		<b>15</b>	



Voltage Wire Color and Position			
Pin Position #	Pin Function	120V	277V & 347V
1	Hot 1	Black	Brown
2	N	White	White
3	G	Green <sup>1</sup>	Green <sup>1</sup>
4	Hot 2	Red	Orange

NOTES:

- 1 UL Listed for auto ground. Use G option only when required by local codes.
- 2 G option is required in Canada.

Three Quick-Flex® dust covers are included for every 10 pieces ordered.

Dimensions are shown in inches (millimeters).

Intended Use

Located above the primary switch location to interface local switching to the Quick-Flex® system.

Provides local switched power for fixtures and the ability to carry on unswitched power to the next location through the use of a Quick-Flex® extender (QE).

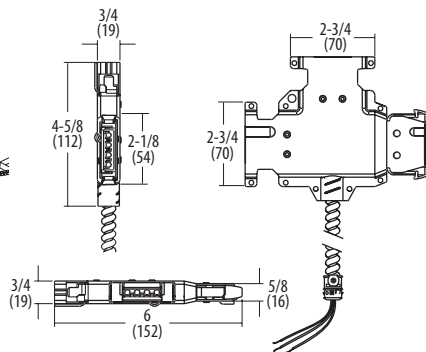
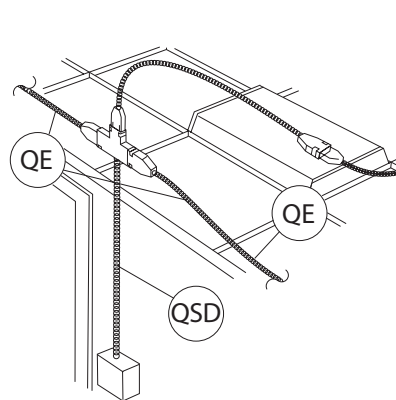
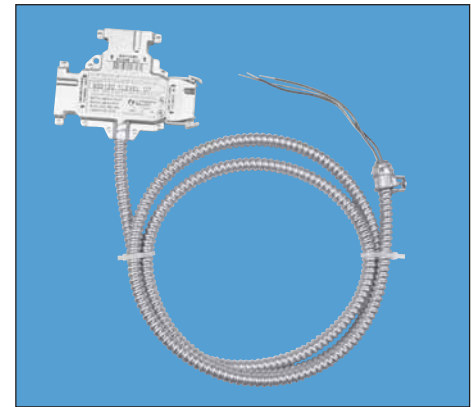
# QSD

## Quick-Flex® Switch Drop

Ordering Information

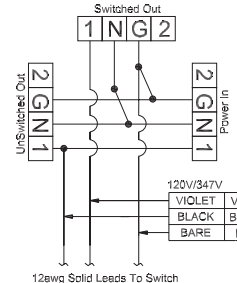
Example: **QSD277 2level01**

Family	Voltage	Size and number of conductors	Length
QSD	120	<b>1level</b> Two 12 AWG conductors plus 12AWG ground <b>2level</b> Four 12 AWG conductors plus 12AWG ground <b>1level/N</b> Two 12 AWG conductors plus 12AWG ground and 12 AWG neutral	<b>01</b> <b>09</b>
	277		
	347		

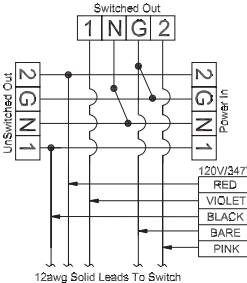


Dimensions are shown in inches (millimeters).

QSD 1LEVEL Wiring Colors/Positions



QSD 2LEVEL Wiring Colors/Positions



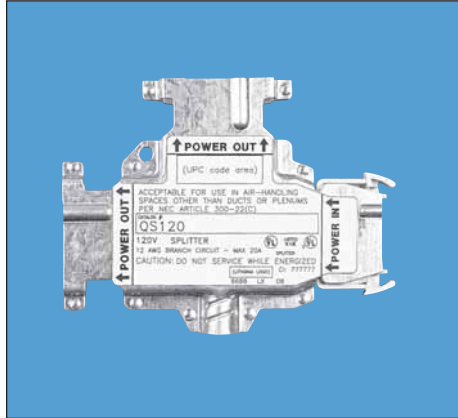
12awg Solid Leads To Switch

12awg Solid Leads To Switch

Recessed Ceiling Lighting Systems

# QS

## Quick-Flex® Splitter



**lightquick<sup>XD</sup>**  
Express delivery products.

See page 11 for details about LightQuick XD.

**Description**

**QS277 12/3G M10**

**QS120 12/3G M10**

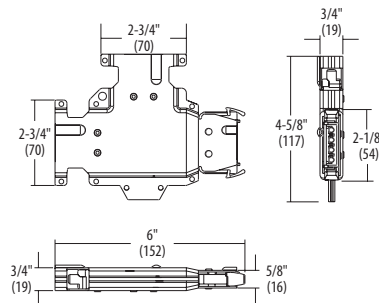
Intended Use

Separates the branch circuit into two directions. The QS is a male/female component that can be used anywhere throughout the Quick-Flex® system.

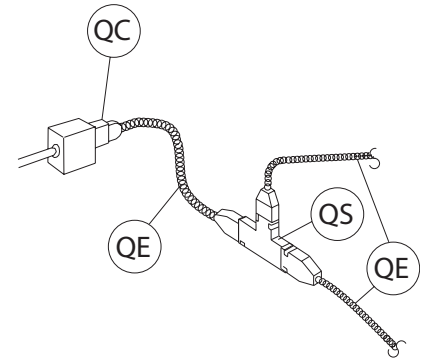
Ordering Information

Family	Voltage	Size and number of conductors
QS	120	12/3G Three 12 AWG conductors plus one 12 AWG ground
	277	
	347	

Example: **QS277 12/3G**



Dimensions are shown in inches (millimeters).



NOTES:  
Three Quick-Flex® dust covers are included for every 10 pieces ordered.

# QD

## Quick-Flex® Drop Cable



Voltage Wire Color and Position			
Pin Position #	Pin Function	120V	277V & 347V
1	Hot 1	Black	Brown
2	N	White	White
3	G	Green <sup>1</sup>	Green <sup>1</sup>
4	Hot 2	Red	Orange

Intended Use

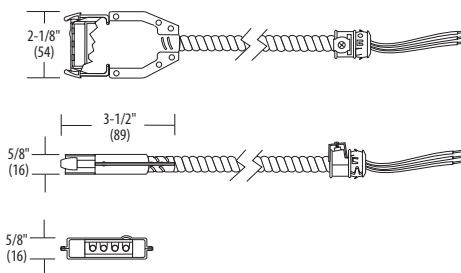
Provides power to electrical devices, which allows them to become part of the Quick-Flex® system.

Provides power integration of other electrical devices into the Quick-Flex® system, such as exit signs, unit equipment, downlights, track lights, and power receptacles. Must be used in conjunction with Quick-Flex® splitter (QS).

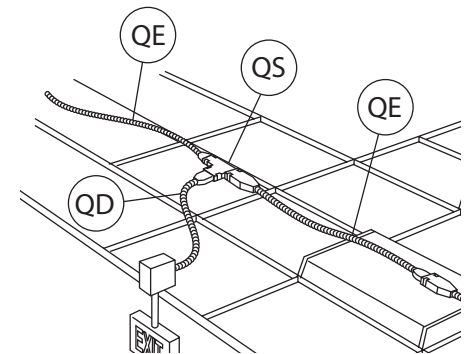
Ordering Information

Family	Voltage	Size and number of conductors	Length
QD	120	12/2G Two 12 AWG conductors plus one 12 AWG ground	01
	277		09
	347		15
		12/3G Three 12 AWG conductors plus one 12 AWG ground	

Example: **QD277 12/3G09**



Dimensions are shown in inches (millimeters).



NOTES:  
Three Quick-Flex® dust covers are included for every 10 pieces ordered.

**Step 1**

**Count the number of fixtures.**

Layout example (see below) shows 11 type A fixtures, two type A1 fixtures and two type B fixtures.

**17 fixtures to wire.**

**Step 2**

**Determine length of cables.**

Measure fixture centers. Cable length should be the length that covers 85 percent of fixtures, plus one foot. Layout example shows all fixtures are on 8-foot centers.

**9-foot cables are needed.**

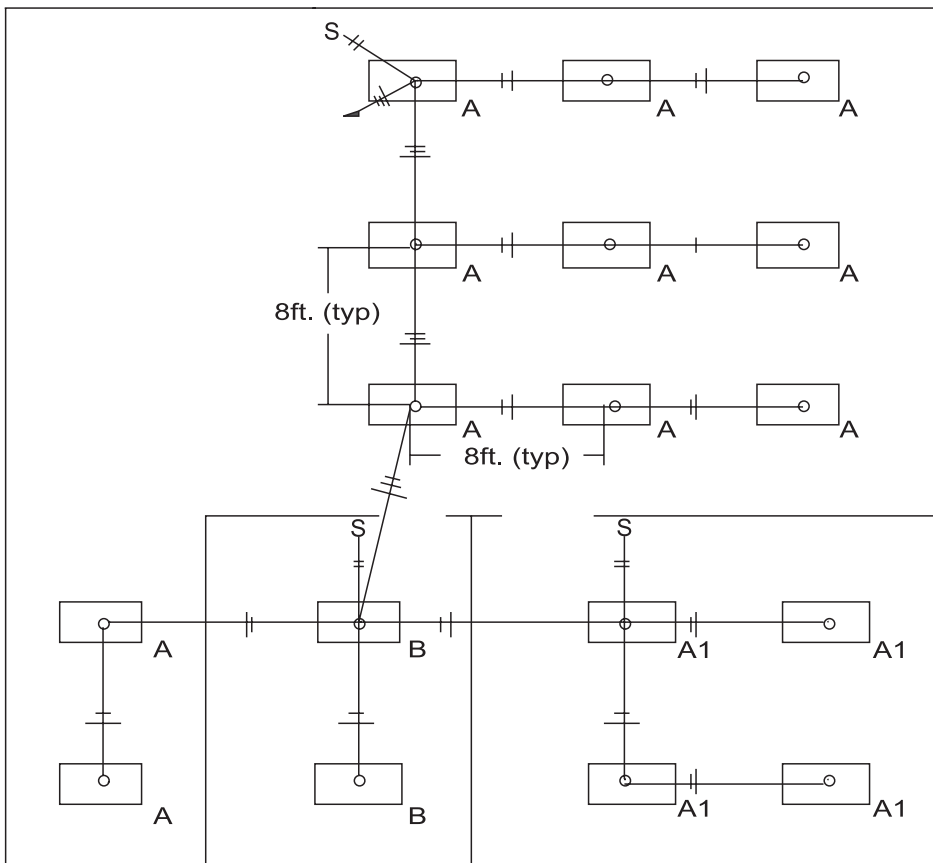
**Step 3**

**Determine number of conductors.**


(Determined by number of switches in a room). Layout example shows all rooms have single-level switching (See Guide to Conductors below for details).

**Use 12/2G conductors.**

Layout Example



Guide to Conductors

Symbol	Description
S	Single-pole switch; requires 12/2G conductors.
SS	Two single-pole switches; requires 12/3G conductors.
S 	Single-pole switch with emergency/night-light; requires 12/3G conductors.

**Based on the results from steps 1-3, establish a bill of materials.**

Using the **percent factors** shown at right, calculate the number of components required. To make the calculations, use the number of fixtures in Step 1 as 100 percent.

**Example:** Percent factor for QE cables is 15 percent.

$17 \times .15 = 2.5$  (round up to 3)

**3 QE extender cables are needed.**

Use the percent factors below to calculate the required numbers of Quick-Flex® components.

Component <sup>1</sup>	Description	Percent Factor	Quantity to order
QFC ___ 12/2G09	Fixture cables to wire the 17 fixtures.	<b>100%</b>	17
QE ___ 12/2G09	Extender cables for extra length where needed.	<b>15%</b>	3
QS ___ 12/3G	Splitter for wiring in more than one direction. <sup>2</sup>	<b>3%</b>	1
QC ___ 12/3G	Converters to connect Reloc® system to hardwiring <sup>3</sup>	<b>12%</b>	3

NOTES:

- 1 Must specify voltage. Example: QFC 120 12/2G09.
- 2 QS available only with 12/3G conductors.
- 3 QC available only with 12/3G conductors.

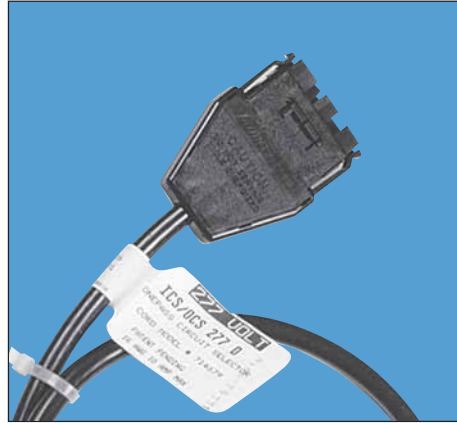
If Quick-Flex® switchdrops (QSD) are required, each switch location must be counted to determine the exact quantity of QSDs needed. For each homerun location, one Quick-Flex® convertor (QC) is needed.



The OnePass® System

# OnePass®

## Patented OnePass® Circuit Selector



**NOTE:**

The catalog number for OnePass® dust covers is RDC3 METAL DUST COVER J50. If extra dust covers are needed, they must be ordered separately and in multiples of 50. Dust covers come in packs of 50 only.

The OnePass® circuit selector features a unique thumbslide action that allows you to choose the desired hot conductor(s) to energize each fixture in the field. The OCS and non-selectable OCU permit disconnecting the fixture without disrupting the power downstream.

The OCS enables all fixtures to be wired the same way, with the ability to select the appropriate circuit when the fixture is installed. For future changes, simply unplug the OCS and select a different circuit.

**Intended Use**

The OnePass® system offers quick installation of industrial fixtures plus the flexibility to relocate fixtures in the future. Patented components allow both fixtures and wiring to be installed at the same time or in one pass, significantly reducing labor.

**Features**

Pin-and-socket contacts.

Rated for use on 20-amp branch circuits.

Safety keying prevents accidental mating of components of different voltages. Color-coded labels for quick voltage identification.

Each conductor and position is properly identified for easy circuit identification throughout

the system.

Circuit selector (OCS) is No. 16AWG rubberized cord with 105°C thermoplastic insulation, conductors rated at 600V. Starter cable, 2-port (OSC2) and OnePass cable, 2-port (OC2) are 10AWG or 12AWG, MC cable with 90°C thermoplastic insulation and conductors rated at 600V.

Fixture removal may be accomplished without interrupting the branch circuit wiring.

Component design allows removal without additional components. Suitable for make or break under load.

Replaces conventional cord and plug. Uniquely keyed for industrial/open-ceiling applications.

Housing components are constructed of textured, high-impact, polymeric compound (OCS). Patent No. 5,679,016 (OCS).

All unused parts are required to be covered. The RDC3 is the dust cover for the OnePass® system. If extra dust covers are needed, they can be ordered separately: RDC3 METAL DUST COVER J50.

**Listings**

UL Listed to U S and Canadian safety standards.

Caution: This product is not intended for installation in outdoor, damp or humid locations. Please consult with factory for use in any classified areas.

# OCS

## OnePass® Circuit Selector



Voltage Wire Color and Position					
120V & 277V Pin Position #	Pin Function	Wire Color	208V, 240V & 480V Pin Position #	Pin Function	Wire Color
1	G	Green	1	G	Green
2	Hot 1 (Selectable)	▼	2	Hot 1 (Selectable)	Black
3	Hot 2 (Selectable)	Black	3	Hot 2 (Selectable)	White
4	Hot 3 (Selectable)	▲	4	Hot 3 (Selectable)	▼
5	N	White	5	N	NA <sup>6</sup>

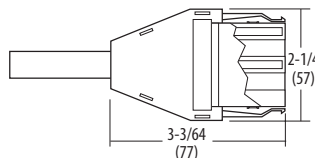
▲ and ▼ denote switch movement

**Intended Use**

A plug-in connection for open ceiling fixtures. Prewired by fixture manufacturer or field installed by contractor.

### Ordering Information

Family	Voltage
OCS	120 <sup>1</sup>
	277 <sup>1</sup>
	347
	208 <sup>2,3,4</sup>
	240 <sup>2,3,4</sup>
	480 <sup>2,3,4</sup>

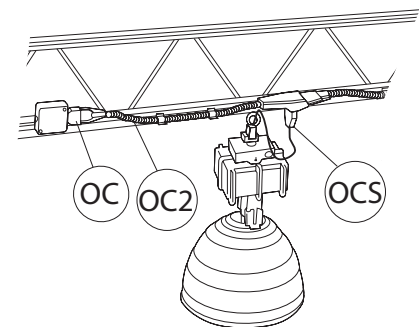


**NOTES:**

- 120 and 277V 2 circuit 2 neutral applications require the OCU to pick up the second Hot and Neutral.
- For 2-circuit 480, 240 and 208V applications, the OCU is required to pick up the 2nd circuit.
- 480, 240 and 208V OCS has 2 selector switches. This allows the selectability to operate the fixture on any combination of phase circuit A, B or C.
- Consult factory for voltages.
- White 5ft. cord is standard.
- No wire in 5th position.

### Example: OCS 277 05 WH

Cable length (ft.)	Cord color
05	WH White cord <sup>5</sup>
10	BK Black cord
15	
20	



Dimensions shown in inches (millimeters).

www.lithonia.com, keyword: OCS

Intended Use

Provides the interface between hardwiring and the Reloc® wiring system. A converter and ex-

tender in one component. The OSC2 is wired into the homerun junction box and brings power to the OCS, OCU or OD.

# OSC2

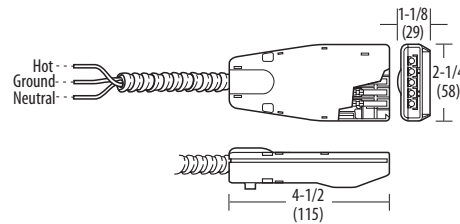
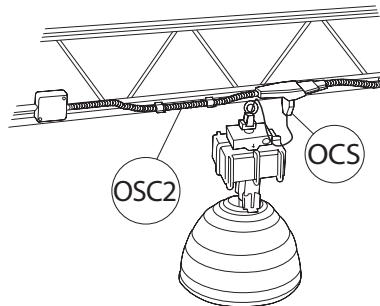
## OnePass® Starter Cable, 2-Port

Ordering Information

Example: **OSC2 277 12/4G 09**

Family	Voltage	Number of conductors	Cable length (ft.)	Options
<b>OSC2</b>	<b>120</b>	<b>12/2G</b> Two No. 12 AWG conductors plus one No. 12 AWG ground	<b>09</b>	<b>2N</b> Two circuit, two neutral; available only in 12/4G conductors only.
	<b>277</b>		<b>15</b>	
	<b>347</b>	<b>12/3G</b> Three No. 12 AWG conductors plus one No. 12 ground	<b>21</b>	
	<b>208<sup>1</sup></b>		<b>25</b>	
	<b>240<sup>1</sup></b>	<b>12/4G</b> Four No. 12 AWG conductors plus one No. 12 ground	<b>31</b>	
	<b>480<sup>1</sup></b>			
	<b>10/2G</b> Two No. 10 AWG conductors plus one No. 10 AWG ground			
	<b>10/3G</b> Three No. 10 AWG conductors plus one No. 10 ground			
	<b>10/4G</b> Four No. 10 AWG conductors plus one No. 10 ground			

NOTES:  
 1 Consult factory for voltages.  
 Three RDC3 dust covers included with every 10 ordered pieces.



Dimensions are shown in inches (millimeters).



Voltage Wire Color and Position					
Pin Position	Pin Function	120/347V	208/240V	277V	480V
1	G	Green	Green	Green	Green
2	Hot1	Black	Black	Brown	Brown
3	Hot2	Red	Red	Orange	Orange
4	Hot3	Blue	Blue	Yellow	Yellow
5	N	White	Violet	Gray	Violet

NOTE: Two neutral (2N) products have gray (120V) white (277V) in 4th position. 208V/240V/480V is hot, provided with Hot in 5th position (12/4G).

Intended Use

Provides the interface between hardwiring and the Reloc® wiring system at homerun location.

# OC

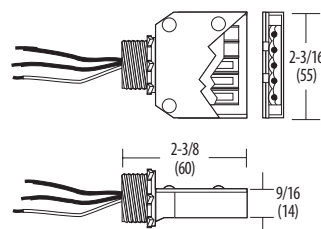
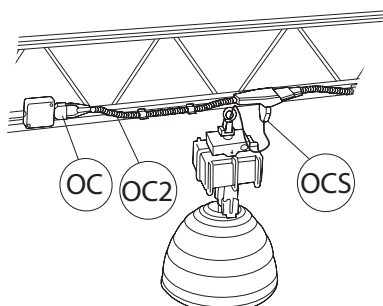
## OnePass® Circuit Distributor

Ordering Information

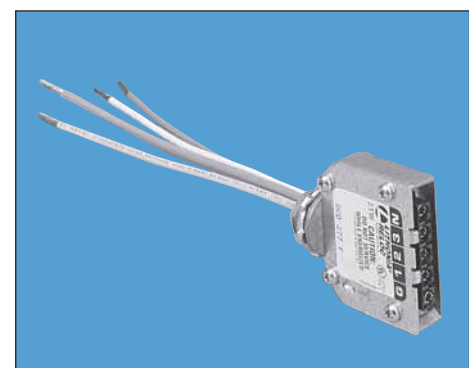
Example: **OC 277 12/4G**

Family	Voltage	Number of conductors	Options
<b>OC</b>	<b>120</b>	<b>12/4G</b> Four No. 12 AWG conductors plus one No. 12 ground	<b>2N</b> Two circuit, two neutral; available only in 12/4G conductors only.
	<b>277</b>		
	<b>347</b>		
	<b>208<sup>1</sup></b>		
	<b>240<sup>1</sup></b>		
<b>480<sup>1</sup></b>			

NOTES:  
 1 Consult factory for voltages.  
 Three RDC3 dust covers included with every 10 ordered pieces.  
 Not available in 10 AWG.



Dimensions are shown in inches (millimeters).



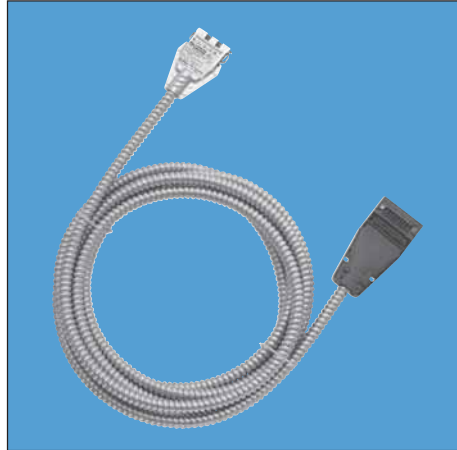
Voltage Wire Color and Position					
Pin Position	Pin Function	120/347V	208/240V	277V	480V
1	G	Green	Green	Green	Green
2	Hot1	Black	Black	Brown	Brown
3	Hot2	Red	Red	Orange	Orange
4	Hot3	Blue	Blue	Yellow	Yellow
5	N	White	Violet	Gray	Violet

NOTE: Two neutral (2N) products have gray (120V) white (277V) in 4th position. 208V/240V/480V is hot, provided with Hot in 5th position (12/4G).

OnePass® Components

# OC2

OnePass® Cable, 2-Port



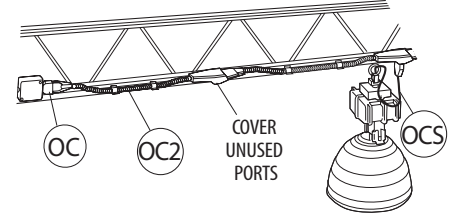
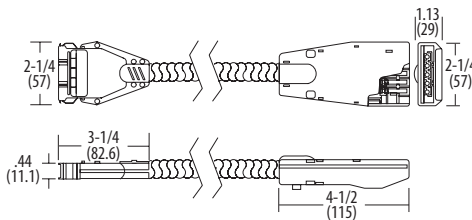
Intended Use

A splitter and cable extender in one easy-to-use component. Used to bring power to OCS, OCU or an OD in industrial applications, or to split a circuit into two directions.

Ordering Information

Example: **OC2 277 12/4G 09**

Family	Voltage	Number of conductors	Cable length (ft.)	Options
<b>OC2</b>	<b>120</b>	<b>12/2G</b> Two No. 12 AWG conductors plus one No. 12 AWG ground	<b>09</b>	<b>2N</b> Two circuit, two neutral; available only in 12/4G conductors only.
	<b>277</b>		<b>15</b>	
	<b>347</b>	<b>12/3G</b> Three No. 12 AWG conductors plus one No. 12 ground	<b>21</b>	
	<b>208<sup>1</sup></b>		<b>25</b>	
	<b>240<sup>1</sup></b>	<b>12/4G</b> Four No. 12 AWG conductors plus one No. 12 ground	<b>31</b>	
	<b>480<sup>1</sup></b>	<b>10/2G</b> Two No. 10 AWG conductors plus one No. 10 AWG ground		
	<b>10/3G</b> Three No. 10 AWG conductors plus one No. 10 ground			
	<b>10/4G</b> Four No. 10 AWG conductors plus one No. 10 ground			



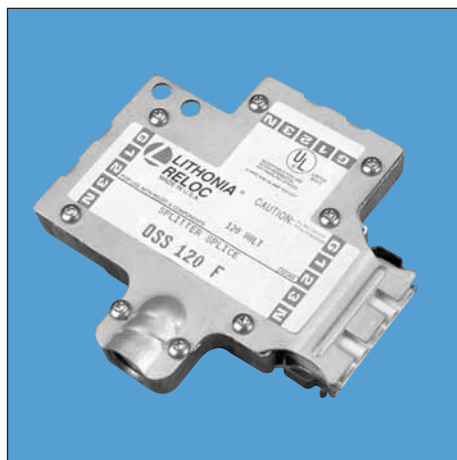
NOTES:  
1 Consult factory for voltages.

Three RDC3 dust covers included with every 10 ordered pieces.

Dimensions shown in inches (millimeters).

# OSS

OnePass® Splitter Splice



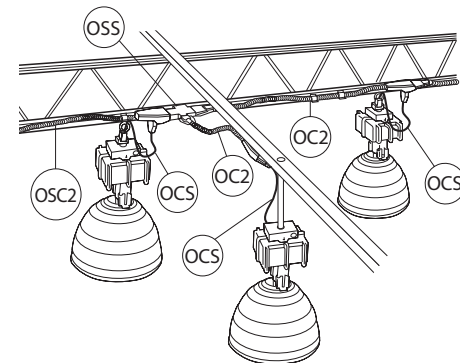
Intended Use

Splits a branch circuit into two directions. Male/female component that can be used anywhere in the OnePass® system.

Ordering Information

Example: **OSS 277 12/4G**

Family	Voltage	Number of conductors
<b>OSS<sup>1</sup></b>	<b>120</b>	<b>12/2G</b>
	<b>277</b>	
	<b>347</b>	<b>12/4G</b>
	<b>208<sup>2</sup></b>	
	<b>240</b>	
	<b>480<sup>2</sup></b>	



NOTES:  
1 Consult factory for voltages.  
2 BSS not available in 10AWG.

Intended Use

A polarized, non-circuit, selectable plug-in connection for industrial fixtures. Prewired by fixture manufacturer or field installed by contractor.

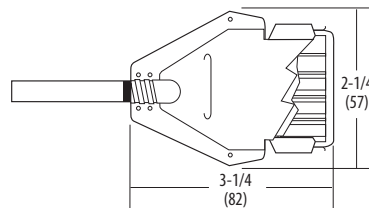
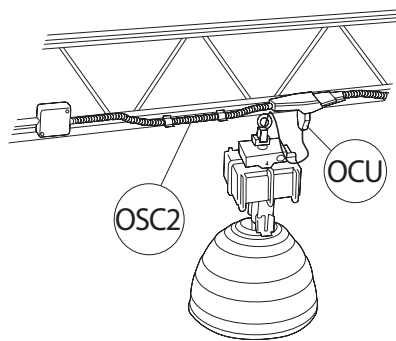
# OCU

## OnePass® Cord Unselectable

Ordering Information

Example: **OCU 480 TAP12 05 WH**

Family	Voltage	Tap from position	Cord length (ft.)	Options	
<b>OCU</b>	<b>120</b>	<b>TAP2</b> 2	<b>05</b>	<b>2N</b> Two circuit, two neutral; available in TAP2 tap position only <b>WH</b> White cord <b>BK</b> Black cord	
	<b>277</b>	<b>TAP12</b> 1 and 2	<b>10</b>		
	<b>208<sup>1</sup></b>	<b>TAP34</b> 3 and 4	<b>15</b>		
	<b>240<sup>1</sup></b>	<b>TAP1</b> 1	<b>20</b>		
	<b>480<sup>1</sup></b>	<b>TAP3</b> 3			
		<b>TAP23</b> 2 and 3			
		<b>TAP123</b> 1 and 2 and 3			



Dimensions shown in inches (millimeters).



NOTES:

- 1 Consult factory for voltages.
- 2 White SFT cord is standard.

Intended Use

Allows miscellaneous devices (exits, emergency units, etc.) to become part of the OnePass® system to be field installed by contractor. Also a plug-in connection for industrial fixtures that can be prewired by fixture manufacturer or field installed by contractor.

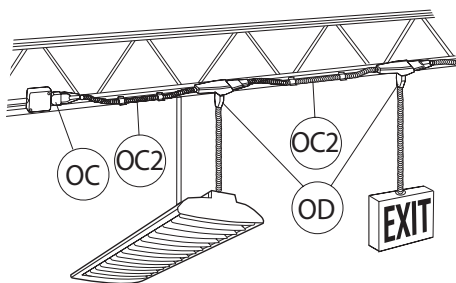
# OD

## OnePass® Drop Cable

Ordering Information

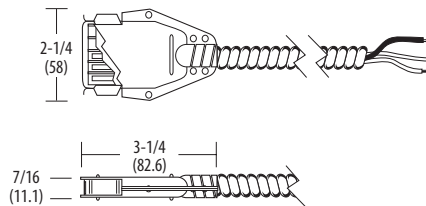
Example: **OD 277 12/2G 15**

Family	Voltage	Number of conductors	Cable length (ft.)	Options
<b>OD</b>	<b>120</b>	<b>12/2G</b> Two No. 12 AWG conductors plus one No. 12 AWG ground	<b>05</b>	<b>2N</b> Two circuit, two neutral; available in 12/4G conductors only.
	<b>277</b>			
	<b>208<sup>1</sup></b>	<b>12/3G</b> Three No. 12 AWG conductors plus one No. 12 ground	<b>15</b>	
	<b>240<sup>1</sup></b>			
	<b>480<sup>1</sup></b>	<b>12/4G</b> Four No. 12 AWG conductors plus one No. 12 ground	<b>20</b>	

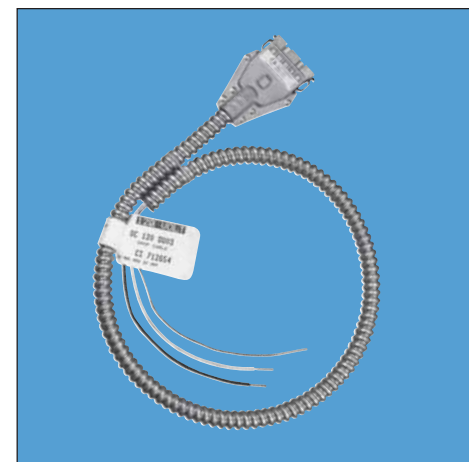


NOTES:

- 1 Consult factory for voltages.



Dimensions are shown in inches (millimeters).



Voltage Wire Color and Position					
Pin Position	Pin Function	120/347V	208/240V	277V	480V
1	G	Green	Green	Green	Green
2	Hot1	Black	Black	Brown	Brown
3	Hot2	Red	Red	Orange	Orange
4	Hot3	Blue	Blue	Yellow	Yellow
5	N	White	Violet	Gray	Violet

NOTE: Two neutral (2N) products have gray (120V) white (277V) in 4th position. 208V/240V/480V is hot, provided with Hot in 5th position (12/4G).

## OnePass® 1-2-3 Bill of Materials Guide

### Step 1

#### Count the number of fixtures.

Layout example (see below) shows 18 type H fixtures.

**17 fixtures to wire.**

### Step 2

#### Determine length of cables.

Measure fixture centers. Cable length should be the length that covers 85 percent of fixtures. Layout example shows all fixtures are on 15-foot centers.

**15-foot cables are needed.**

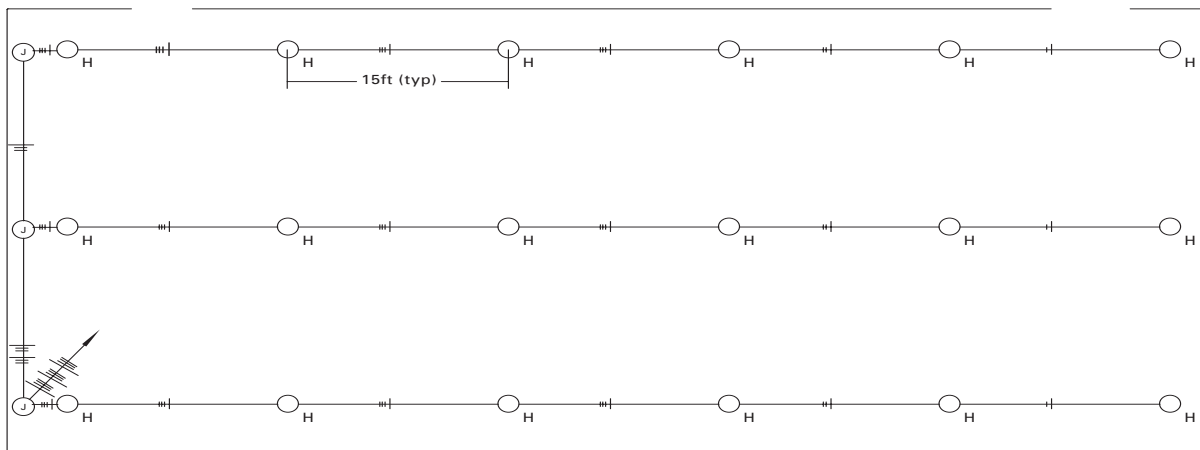
### Step 3

#### Determine number of conductors.

Determined by maximum number of short vertical marks in the layout. Layout example shows three short vertical marks. (See Guide to Number of Conductors below for details).

**Use 12/4G conductors.**

### Layout Example



### Guide to Number of Conductors

Symbol	Description
	One short vertical mark indicates 12/2G conductors are required.
	Two short vertical marks indicate 12/3G conductors are required.

Symbol	Description
	Three short vertical marks indicate 12/4G conductors are required.

NOTE: Long vertical mark denotes neutral.

### Based on the results from steps 1-3, establish a bill of materials.

Using the **percent factors** shown at right, calculate the number of components required. To make the calculations, use the number of fixtures in Step 1 as 100 percent.

**Example:** Percent factor for OC converters is 13 percent.

$$18 \times .13 = 2.34 \text{ (round up to 3)}$$

**3 OC converters are needed.**

Use the percent factors below to calculate the required numbers of OnePass® components.

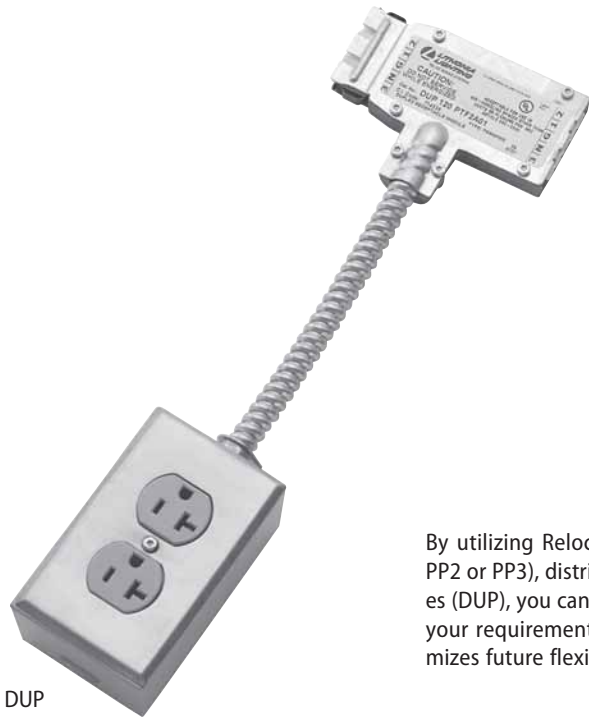
Component <sup>1</sup>	Description	Percent factor	Quantity to order
OC2 ___ 12/4G15	Cables to wire the 18 fixtures.	<b>100%</b>	18
OCS ___ ___ <sup>2</sup>	Circuit selectors to connect the 18 fixtures.	<b>100%</b>	18
OC ___ 12/4G	Converters to connect Reloc system to hardwiring.	<b>13%</b>	3

#### NOTES:

- Must specify voltage. Example: OC2277 12/4G 15.
- Must specify length of OCS in feet. Example: OCS 12005 WH.



Reloc® specialty lighting and power products provide maximum flexibility and unique capabilities for full system integration where more complex wiring schemes are required. This includes raised floor and modular convenience power applications such as retail displays, gondolas, kiosks and checkout registers.



DUP

By utilizing Reloc® prewired power poles (PP1, PP2 or PP3), distribution boxes (DB) and duplexes (DUP), you can configure a system that meets your requirements, installation costs and maximizes future flexibility.



DB



PP

Specialty Lighting Overview

# Specialty Lighting



Intended Use

Five-wire system accommodates applications requiring three circuits with a common neutral; or two circuit; two neutral or two circuits, one neutral and an isolated ground.

Features

Rated for use on 20-amp branch circuits. Pin-and-socket contacts.

All conductors are No. 12AWG copper with 90°C thermoplastic insulation rated at 600 volts.

Safety keying prevents accidental mating of components of different voltages and reverse polarity.

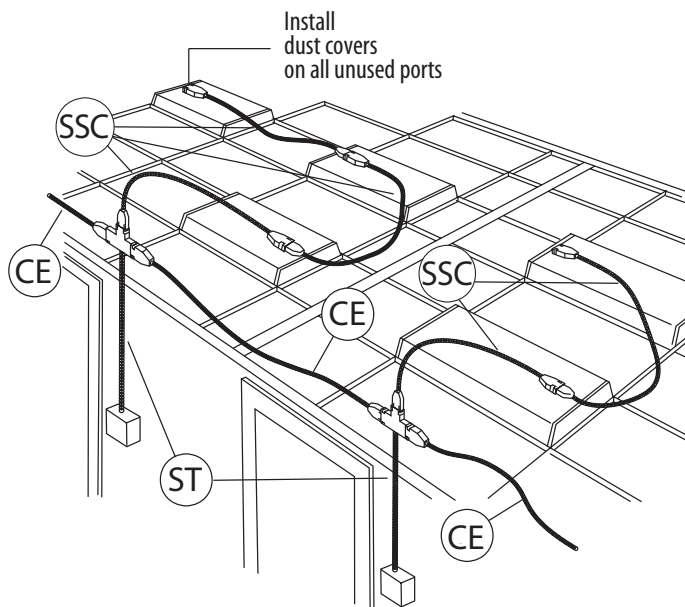
Color-coded labels for quick voltage identification.

Additional labeling properly denotes type and position of each conductor.

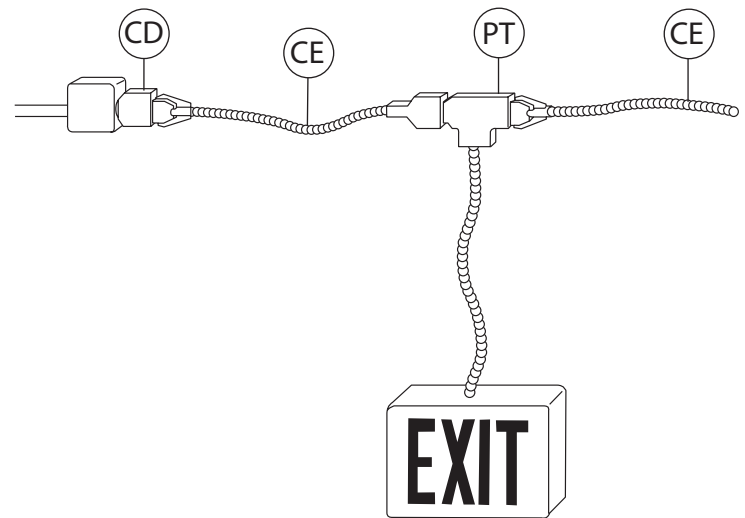
Autolatching springs prevent accidental disengagement.

Caution: This product is not intended for installation in outdoor, damp or humid locations. Please consult with factory for use in any classified areas.

Specialty Lighting System View



Reloc® 820 Power Tee



Power Wiring Overview

# Power Wiring

**Intended Use**

Five-wire system accommodates applications requiring three circuits with a common neutral; or two circuit two neutral; or two circuit, one neutral and an isolated ground.

**Features**

Rated for use on 20-amp branch circuits. Pin-and-socket contacts.

All conductors are No. 12 AWG copper with 90°C thermoplastic insulation rated at 600 volts.

Safety keying prevents accidental mating of components for different voltages and reverse polarity.

Color-coded labels for quick voltage identification.

All conductors are clearly identified on the product to simplify the installation.

All components provide a fully rated No. 12 AWG grounding conductor.

Isolated ground conductor option available. Installs through standard 1" trade-size knockout.

6" of exposed leads, prestripped for easy wiring.

Duplexes supported for new construction and modular cabinets. Single and double duplexes are available.

Standard and clean power (isolated ground) are available with certain components.

Power poles are available in a wide variety of optional finishes.

All unused ports are required to be covered. The RDC3 is the dust cover for the specialty lighting and power system.

If extra dust covers are needed, they are to be ordered separately: RDC3 METAL DUST COVER J50.

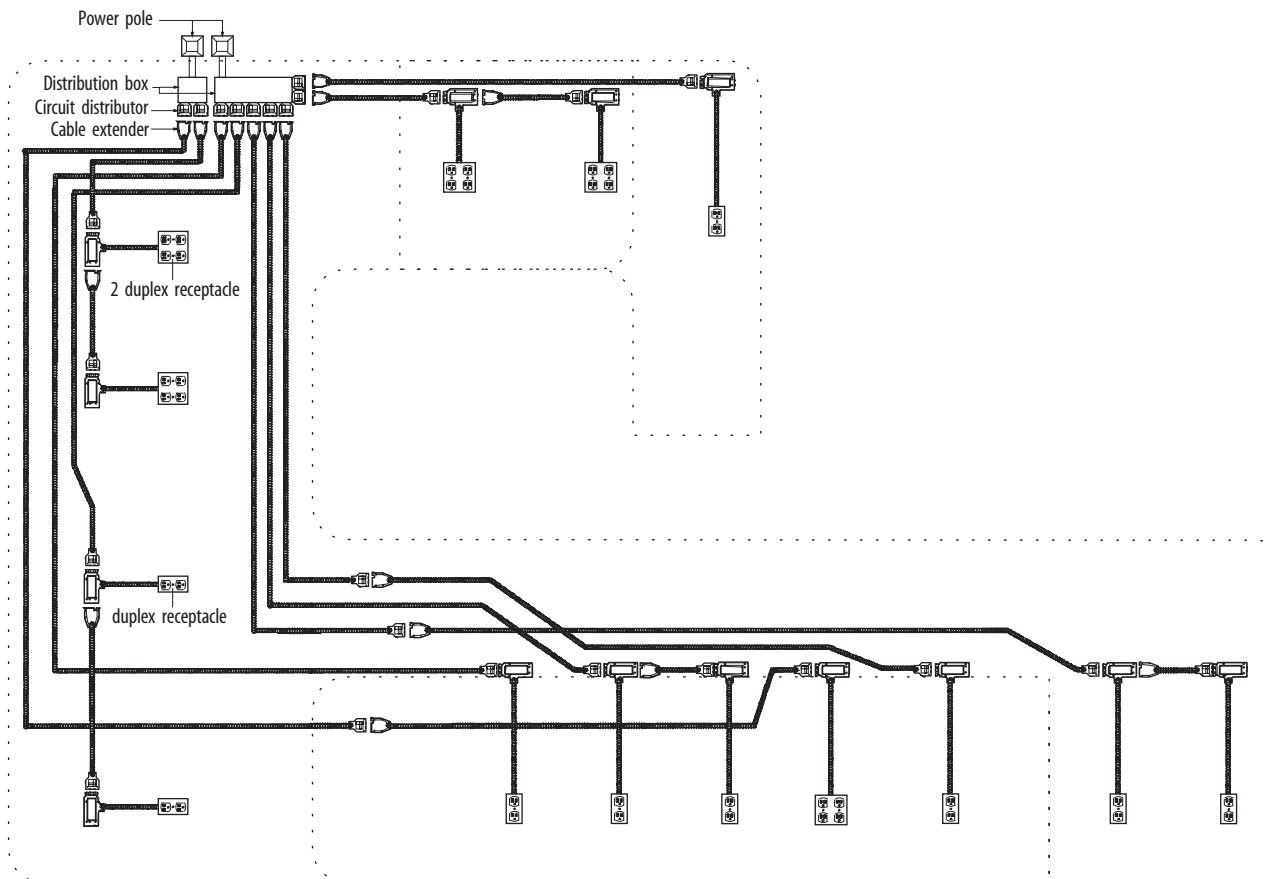
**Listings**

UL Listed. CSA Certified. Distribution boxes (DB) are UL Listed only.



## Counter Power System View

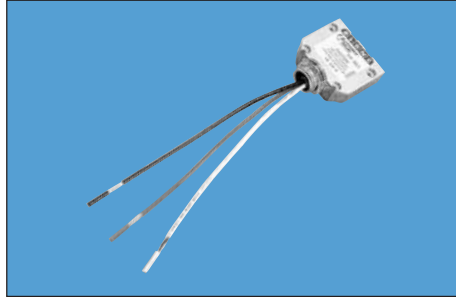
NOTE: All unused ports require a dust cover.



## Specialty Lighting & Power Components

# CD

### 820 Circuit Distributor



Voltage Wire Color and Position			
Pin Position	Pin Function	120/347V	277V
1	Hot2	Red	Brown
2	Hot1	Black	Yellow
3	G	Green	Green
4	N	White	White
5	Hot3	Blue	Orange

NOTE: Two neutral (2N) products provided with gray (120V) white (277V) in 5th position. Isolated ground wire option (IGW) provided with Yellow/Green (120V only) wire in the 5th position.

#### Intended Use

Provides interface between hardwiring and the Reloc® wiring system. Conventional wiring methods bring power from panel to homerun location, where CD is installed.

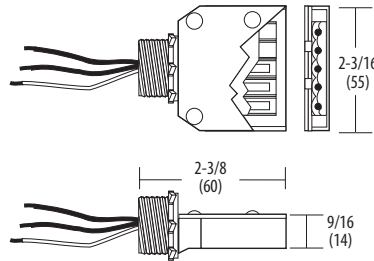
#### Ordering Information

Family	Voltage	Number of conductors	Options
<b>CD</b>	<b>120</b> <b>277</b> <b>347</b>	<b>D</b> Three <b>E</b> Four <b>F</b> Five	<b>IGW</b> Isolated ground wire; available with 120V and conductor only <b>2N</b> Two circuit, two neutral; available with 120V, 277V and 347V; F conductors only <b>CSA</b> CSA Certified

#### NOTES:

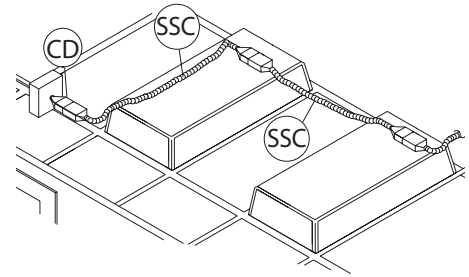
1 Must add CSA suffix for certification.

Three dust covers are included for every 10 pieces ordered.



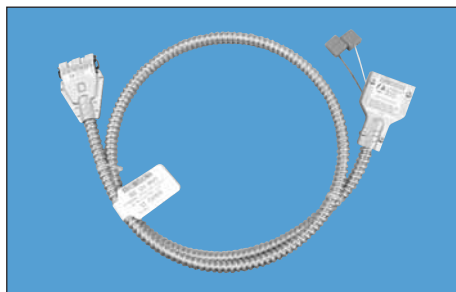
Dimensions are shown in inches (millimeters).

#### Example: CD 120 F CSA<sup>1</sup>



# SSC

### 820 Standard Selector Cable

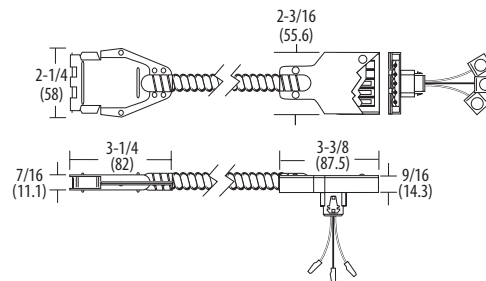


#### Intended Use

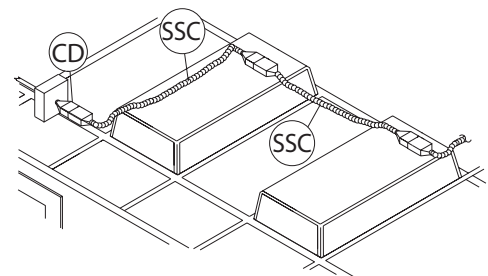
Male/female cable, provides power from fixture to fixture. Attaches to access plate or through 1/2-inch trade-size knockout.

#### Ordering Information

Family	Voltage	Number of conductors	Factory keying	Cable length (ft.)	Options
<b>SSC</b>	<b>120</b> <b>277</b> <b>347</b>	<b>D</b> Three <b>E</b> Four <b>F</b> Five	<b>U</b>	<b>09</b> <b>11</b> <b>13</b> <b>15</b>	<b>2N</b> Two circuit, two neutral; available with F conductor only <b>G</b> Ground lead with lug terminal (Required in Canada) <b>CSA</b> CSA Certified



Dimensions are shown in inches (millimeters).



#### NOTES:

- 1 Must add CSA suffix for certification.
- 2 Three dust covers are included for every 10 pieces ordered.

Intended Use

Male/female cable that provides additional length anywhere throughout the Reloc® system.

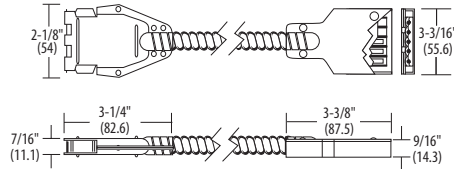
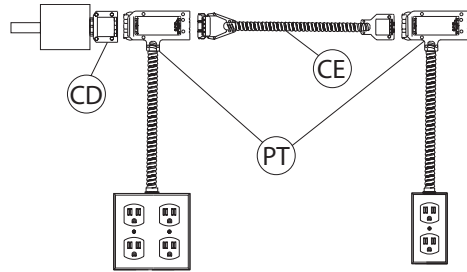
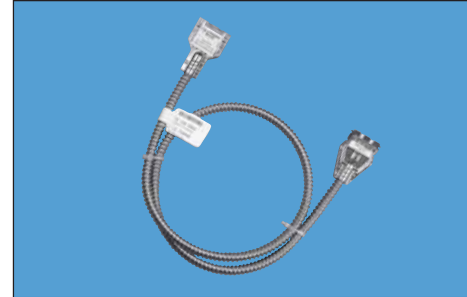
# CE

## 820 Cable Extender

Ordering Information

Example: **CE 277 F U 11 2N CSA<sup>1</sup>**

Family	Voltage	Number of conductors	Factory keying	Cable length (ft.)	Options
<b>CE</b>	<b>120</b> <b>277</b> <b>347</b>	<b>D</b> Three <b>E</b> Four <b>F</b> Five	<b>U</b>	<b>09</b> <b>11</b> <b>15</b> <b>21</b> <b>25</b>	<b>IGW</b> Isolated ground wire; available only with 120V and F conductor <b>2N</b> Two circuit, two neutral; available with 120, 277 and 347V; F conductor only <b>CSA</b> CSA Certified



NOTES:

1 Must add CSA suffix for certification.

Three dust covers are included for every 10 pieces ordered.

Dimensions are shown in inches (millimeters).

Intended Use

Introduces local switching to Reloc® systems. Located above primary switch location; provides local switched power and unswitched power to be used as needed.

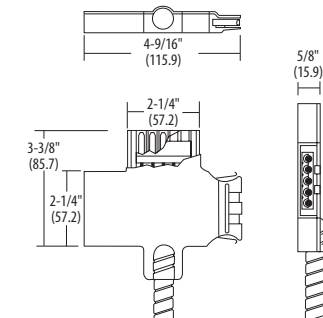
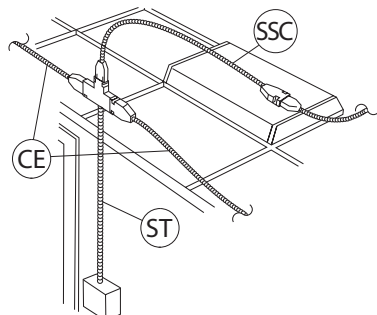
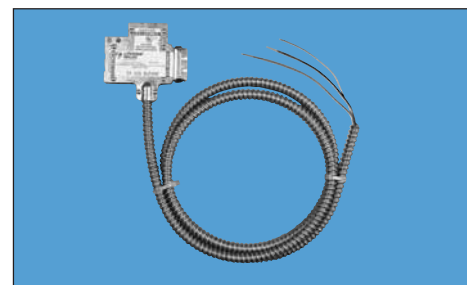
# ST

## 820 Switching Tee

Ordering Information

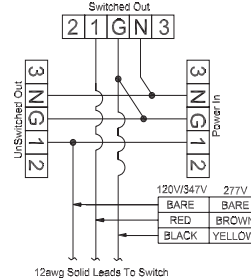
Example: **ST 277 D1 P U 08 CSA<sup>1</sup>**

Family	Voltage	Number of conductors	Switching function	Factory keying	Drop type	Drop length (ft.)	Options
<b>ST</b>	<b>120</b> <b>277</b> <b>347</b>	<b>D</b> Three <b>E</b> Four <b>F</b> Five	<b>1</b> Single level <b>2</b> Two level (D and E conductors only)	<b>U</b>	<b>P</b> Protected	<b>08</b>	<b>N</b> Neutral provided in drop (available with D conductor only) <b>CSA</b> CSA Certified

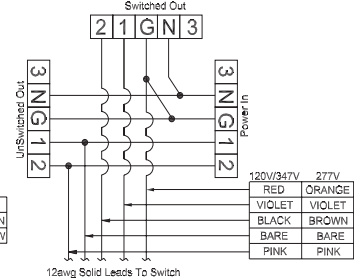


Dimensions are shown in inches (millimeters).

ST 1LEVEL Wiring Colors/Positions



ST 2LEVEL Wiring Colors/Positions



NOTES:

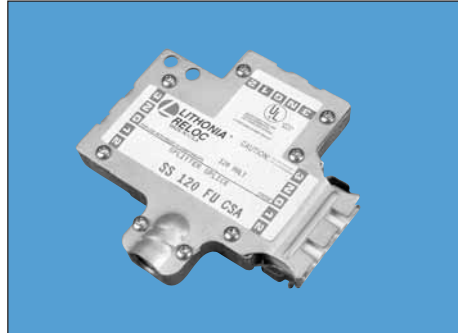
1 Must add CSA suffix for certification.



## Specialty Lighting & Power Components

# SS

### 820 Splitter Splice



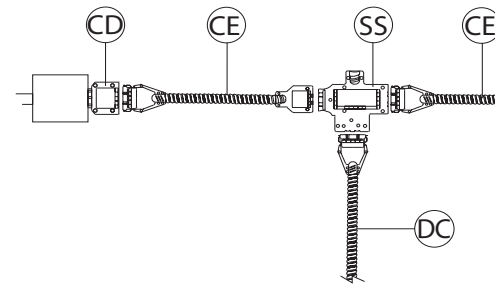
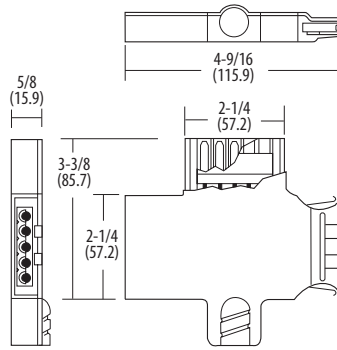
#### Intended Use

Used to split branch circuit into two directions in commercial or power applications.

#### Ordering Information

Family	Voltage	Number of conductors	Factory keying	Option
<b>SS</b>	<b>120</b> <b>277</b> <b>347</b>	<b>F</b> Five	<b>U</b>	<b>IGW</b> Isolated ground wire; available only with 120V and F conductor. <b>2N</b> Two circuit, two neutral; available with 120, 277 and 247V; F conductor only. <b>CSA</b> CSA Certified

Example: **SS 277 F U CSA<sup>1</sup>**



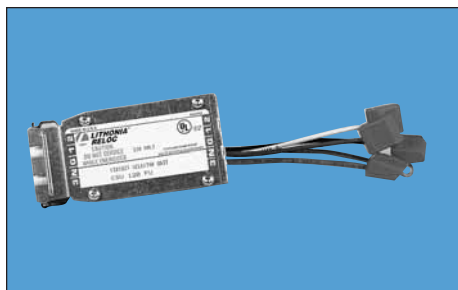
NOTES:

<sup>1</sup> Must add CSA suffix for certification.

Dimensions are shown in inches (millimeters).

# CSU

### 820 Circuit Selector Unit



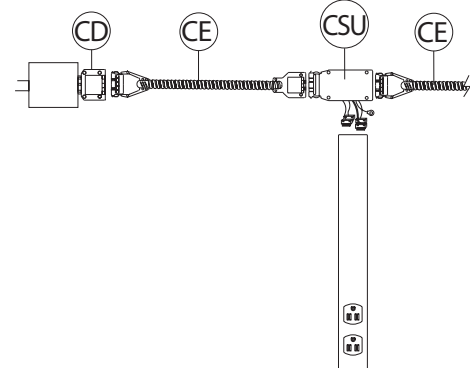
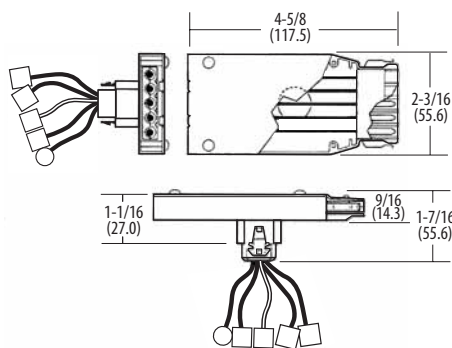
#### Intended Use

Provides wiring of any device through 1/2" trade-size knockout. CSU uses No. 12 AWG leads, allowing full circuit access.

#### Ordering Information

Family	Voltage	Number of conductors	Factory keying	Option
<b>CSU</b>	<b>120</b> <b>277</b> <b>347</b>	<b>F</b> Five	<b>U</b>	<b>IGW</b> Isolated ground wire; available only with 120V and F conductor. <b>2N</b> Two circuit, two neutral; available with 120, 277 and 247V; F conductor only. <b>CSA</b> CSA Certified

Example: **CSU 120 F U CSA<sup>1</sup>**



Voltage Wire Color and Position			
Pin Position	Pin Function	120/347V	277V
1	Hot2	Red	Brown
2	Hot1	Black	Yellow
3	G	Green	Green
4	N	White	White
5	Hot3	Blue	Orange

NOTE: Two neutral (2N) products provided with gray (120V) white (277V) in 5th position. Isolated ground wire option (IGW) provided with Yellow/Green (120V only) wire in the 5th position.

NOTES:

<sup>1</sup> Must add CSA suffix for certification.

Dimensions are shown in inches (millimeters).

[www.lithonia.com](http://www.lithonia.com), keywords: **SS** and **CSU**

Intended Use

A through-wired component that makes it possible to select which branch circuit

conductor feeds a specific device. Also provides power to devices used on convenience power, access floor systems and commercial lighting.

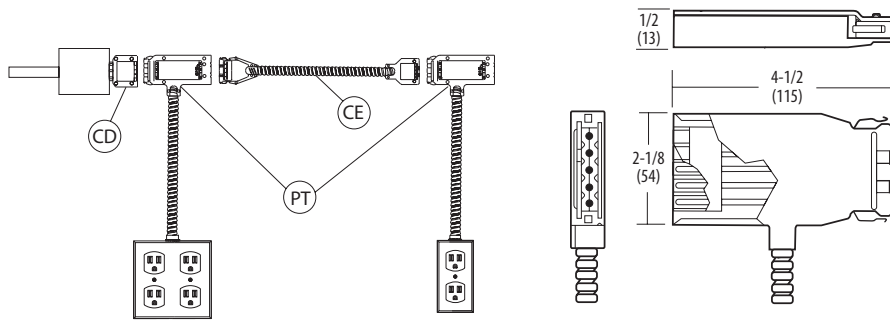
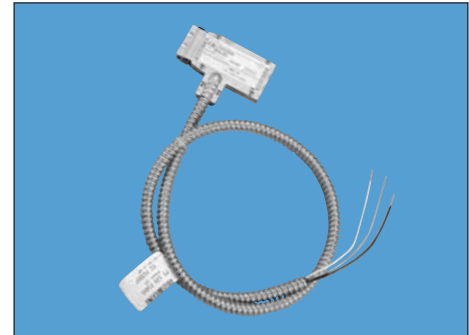
# PT

## 820 Power Tee

Ordering Information

Example: **PT 120 F1 A 03 CSA<sup>1</sup>**

Family	Voltage	Drop type	Cable length (ft.)	Options
PT	120	A Armored	01	<b>IGW</b> Isolated ground wire; available only with 120V and F conductor. <b>2N</b> Two circuit, two neutral; available only with 120, 277 and 347V; F conductor. <b>CSA</b> CSA Certified
	277		03	
	347		09	
Number of conductors		Tap position		
F Five		1 One	13 One and three	
		2 Two	23 Two and three	
		3 Three	123 One, two and three	
		12 One and two		



Dimensions are shown in inches (millimeters).

Voltage Wire Color and Position			
Pin Position	Pin Function	120/347V	277V
1	Hot2	Red	Brown
2	Hot1	Black	Yellow
3	G	Green	Green
4	N	White	White
5	Hot3	Blue	Orange

NOTE: Two neutral (2N) products provided with gray (120V) white (277V) in 5th position. Isolated ground wire option (IGW) provided with Yellow/Green (120V only) wire in the 5th position.

NOTES:

1 Must add CSA suffix for certification.

Intended Use

Provides integration of other electrical devices into the 820 system, such as power outlets and power strips (see above).

Conventional pipe and wiring not required to convey wiring.

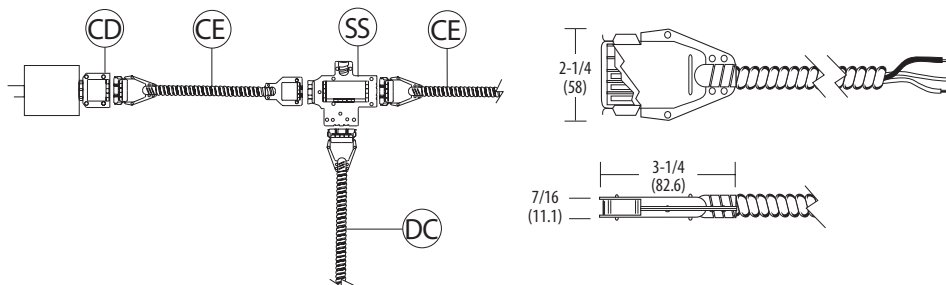
# DC

## 820 Drop Cable

Ordering Information

Example: **DC 120 D U 09 CSA<sup>1</sup>**

Family	Voltage	Number of conductors	Factory keying	Cable length (ft.)	Options
DC	120	D Three	U	09	<b>IGW</b> Isolated ground wire; available only with 120V and F conductor. <b>2N</b> Two circuit, two neutral; available only with 120, 277 and 347V; F conductor. <b>CSA</b> CSA Certified
	277	E Four		11	
	347	F Five		13	
			15		



Dimensions are shown in inches (millimeters).

Voltage Wire Color and Position			
Pin Position	Pin Function	120/347V	277V
1	Hot2	Red	Brown
2	Hot1	Black	Yellow
3	G	Green	Green
4	N	White	White
5	Hot3	Blue	Orange

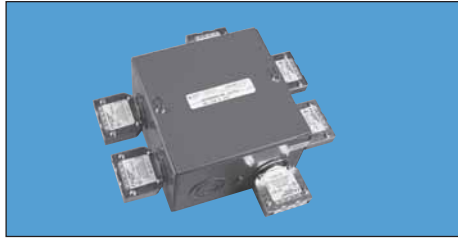
NOTE: Two neutral (2N) products provided with gray (120V) white (277V) in 5th position. Isolated ground wire option (IGW) provided with Yellow/Green (120V only) wire in the 5th position.

NOTES:

1 Must add CSA suffix for certification.

## Distribution Box

# DB



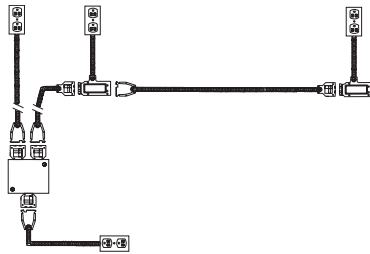
### Intended Use

The distribution box (DB) can be used as the interface between the Reloc® wiring system and hardwiring. The DB can be used to distribute power to power tracks, wall units, gondola lamps and other lighting displays. From the DB, circuits can be fed in different directions.

### Ordering Information

Example: **DB 120 F 4CD/1DC 01**

Family	Voltage	Number of conductors	Quantity	Outgoing power ports	Quantity	Incoming power ports	DC/PT length	Options
DB	120	D Three E Four F Five	1 2 3 4 5 6	CD	1 2 3 4	DC Drop cable PT Power tee	01 03 05	IGW Isolated ground wire; with E and F conductors only 2N Two circuit, two neutral; with F conductor only



Box Dimensions			
# of Outgoing Power Ports	Width of Box	Length of Box	Height of Box
1-6	6"	6"	3"
7-8	6"	8"	4"
9-14*	14"	16"	4.5"

\*Standoff legs included on this version.

## Duplex Receptacle

# DUP



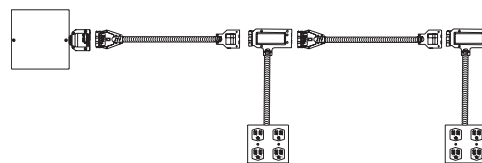
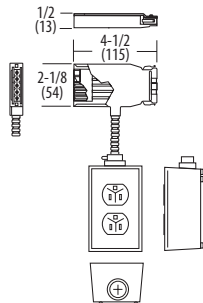
### Intended Use

The DUP is a prewired power receptacle outlet box that integrates with a Reloc® system. The DUP can be used to manage phase loading on power receptacle applications. Pre-order the appropriate number of receptacles for each circuit prewired from the factory.

### Ordering Information

Example: **DUP 120 PT F1A01**

Number of duplexes	Series	Voltage	Interface component	Number of conductors	Hot receptacle position	Type of drop	Cable length (ft.)	Options
(blank) One 2 Two	DUP	120	PT Power tee DC Drop cable	D Two E Three F Four	1 One 2 Two 3 Three	A Armoured	01 05	IGW Isolated ground wire; with E and F conductors only (Add only if required.)



Dimensions are shown in inches (millimeters).

# PP

### Intended Use

A convenient and economical means to provide power, data and/or telecommunications cables to a workstation. The Lithonia PP2 is designed to be used in areas where traditional wiring methods would prove to be difficult, costly and unsightly.

### Features

- “1” beam construction for strength and rigidity.
- IBEW labeled.
- All installation hardware supplied.
- Rated for use on 20 amp branch circuits.
- Receptacle options of NEMA configuration duplex receptacles standard.
- Two channel – isolates power and communications wiring.

Circuit conductors are solid No. 12 AWG copper with 600 volt 90°C thermo-plastic insulation.

Available with a wide variety of electrical, data and telecommunications options.

Wire leads extend to top of pole where connections are made above the ceiling.

Available in a wide variety of optional finishes.

Anchors to carpet or tile floor coverings.

½ inch knockouts in end caps for easy installation.

Communications compartment supplied with protective bushing and easily removable cover.

### Listings

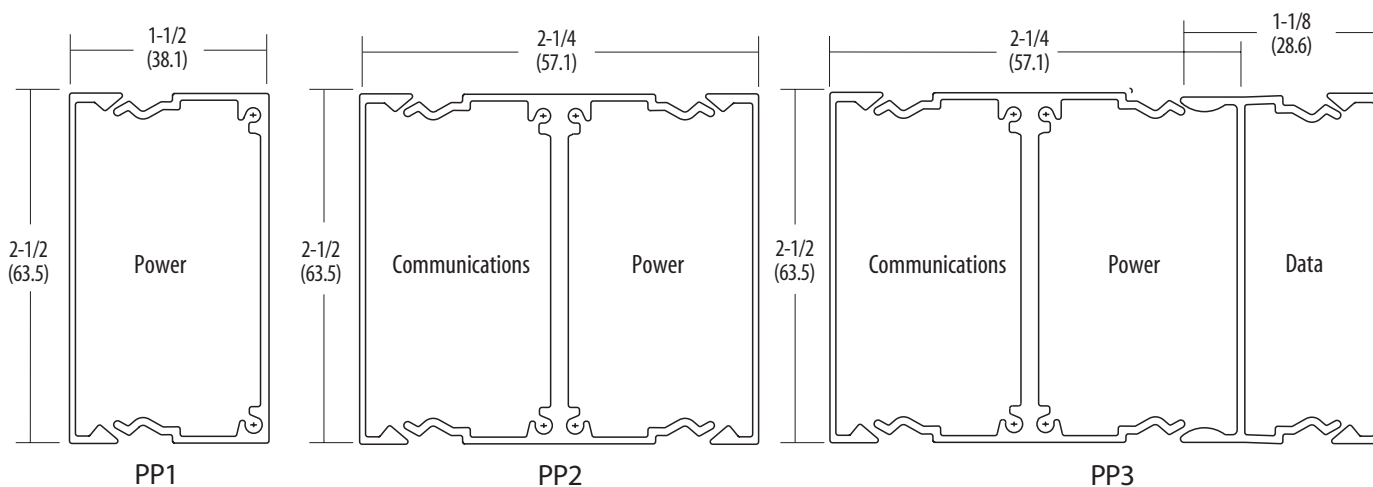
UL Listed.



### Ordering Information

Example: **PP2 L126 GY 2D20A120V H24 IGB**

Family	Length <sup>1</sup>	Pole color <sup>2</sup>	Receptacles/amps/voltage <sup>3</sup>	Receptacle mounting height <sup>4</sup>	Option
<b>PP1</b> 1 channel	<b>L78</b>	<b>WH</b> White	<b>ID20A120V</b> One duplex 20 amp/120 volt	(blank) 3.25" from bottom	(blank) None
<b>PP2</b> 2 channel	<b>L102</b>	<b>GY</b> Gray	<b>IR30A208V</b> One receptacle 30 amp/208 volt	<b>H24</b> 24" from bottom	<b>IG</b> Isolated grid all receptacles
<b>PP3</b> 3 channel	<b>L126</b>	<b>BA</b> Brushed aluminum	<b>2D20A120V</b> Two duplex 20 amp/120 volt	<b>H48</b> 48" from bottom	<b>IGB</b> Isolated grid bottom receptacle
	<b>L150</b>				<b>2C</b> Two circuits
	<b>L186</b>				<b>IGT</b> Isolated grid top receptacle
	<b>L222</b>				
	<b>L264</b>				



NOTES:

- Power pole lengths are shown in inches.
- Receptacle and plate colors will match pole color except for brush aluminum, which will come with a gray receptacle and plate.
- 30A208v is single receptacle.
- Inches from bottom of the pole to the center of the duplex or receptacle.

## National Electric Codes Articles as They Apply to Modular Wiring

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### ARTICLE 604 Manufactured Wiring Systems

#### 604.1 Scope.

The provisions of this article apply to field-installed wiring using off-site manufactured subassemblies for branch circuits, remote-control circuits, signaling circuits, and communications circuits in accessible areas.

#### 604.2 Definition.

**Manufactured Wiring System.** A system containing component parts that are assembled in the process of manufacture and cannot be inspected at the building site without damage or destruction to the assembly.

#### 604.3 Other Articles.

Except as modified by the requirements of this article, all other applicable articles of this Code shall apply.

#### 604.4 Uses Permitted.

Manufactured wiring systems shall be permitted in accessible and dry locations and in ducts, plenums, and other air-handling spaces where listed for this application and installed in accordance with 300.22.

Exception No. 1: In concealed spaces, one end of tapped cable shall be permitted to extend into hollow walls for direct termination at switch and outlet points.

Exception No. 2: Manufactured wiring system assemblies installed outdoors shall be listed for use in outdoor locations.

#### 604.5 Uses Not Permitted.

Manufactured wiring system types shall not be permitted where limited by the applicable article in Chapter 3 for the wiring method used in its construction.

#### 604.6 Construction.

##### (A) Cable or Conduit Types.

**(1) Cables.** Cable shall be listed Type AC cable or listed Type MC cable containing nominal 600-volt, 8 to 12 AWG insulated copper conductors with a bare or insulated copper equipment grounding conductor equivalent in size to the ungrounded conductor.

Other cables as listed in 725.61, 800.113, 820.113, and 830.179 shall be permitted in manufactured wiring systems for wiring of equipment within the scope of their respective articles.

**(2) Conduits.** Conduit shall be listed flexible metal conduit or listed liquidtight flexible conduit containing nominal 600-volt, 8 to 12 AWG insulated copper conductors with a bare or insulated copper equipment grounding conductor equivalent in size to the ungrounded conductor.

Exception No. 1 to (1) and (2): A luminaire (fixture) tap, no longer than 1.8 m (6 ft) and intended for connection to a single luminaire (fixture), shall be permitted to contain conductors smaller than 12 AWG but not smaller than 18 AWG.

Exception No. 2 to (1) and (2): Listed manufactured wiring assemblies containing conductors smaller than 12 AWG shall be permitted for remote-control, signaling, or

communication circuits.

**(3) Flexible Cord.** Flexible cord suitable for hard usage, with minimum 12 AWG conductors, shall be permitted as part of a listed factory-made assembly not exceeding 1.8 m (6 ft) in length when making a transition between components of a manufactured wiring system and utilization equipment, other than luminaires (fixtures), not permanently secured to the building structure. The cord shall be visible for its entire length and shall not be subject to strain or physical damage.

**(B) Marking.** Each section shall be marked to identify the type of cable, flexible cord, or conduit.

**(C) Receptacles and Connectors.** Receptacles and connectors shall be of the locking type, uniquely polarized and identified for the purpose, and shall be part of a listed assembly for the appropriate system.

**(D) Other Component Parts.** Other component parts shall be listed for the appropriate system.

**(E) Securing and Supporting.** Manufactured wiring systems shall be secured and supported in accordance with the applicable cable or conduit article for the cable or conduit type employed.

**(F) Luminaires (Fixtures).** Installation of listed electric-discharge luminaires (fixtures) complying with 410.30(C) shall be permitted.

#### 604.7 Unused Outlets.

All unused outlets shall be capped to effectively close the connector openings.



**300.11 Securing and Supporting.**

**(A) Secured in Place.** Raceways, cable assemblies, boxes, cabinets, and fittings shall be securely fastened in place. Support wires that do not provide secure support shall not be permitted as the sole support. Support wires and associated fittings that provide secure support and that are installed in addition to the ceiling grid support wires shall be permitted as the sole support. Where independent support wires are used, they shall be secured at both ends. Cables and raceways shall not be supported by ceiling grids.

**(1) Fire-Rated Assemblies.** Wiring located within the cavity of a fire-rated floor–ceiling or roof–ceiling assembly shall not be secured to, or supported by, the ceiling assembly, including the ceiling support wires. An independent means of secure support shall be provided and shall be permitted to be attached to the assembly. Where independent support wires are used, they shall be distinguishable by color, tagging, or other effective means from those that are part of the fire-rated design.

Exception: The ceiling support system shall be permitted to support wiring and equipment that have been tested as part of the fire-rated assembly.

FPN: One method of determining fire rating is testing in accordance with NFPA 251-1999, Standard Methods of Tests of Fire Endurance of Building Construction and Materials.

**(2) Non-Fire-Rated Assemblies.** Wiring located within the cavity of a non-fire-rated floor–ceiling or roof–ceiling assembly shall not be secured to, or supported by, the ceiling assembly, including the ceiling support wires. An independent means of secure support shall be provided.

Exception: The ceiling support system shall be permitted

to support branch-circuit wiring and associated equipment where installed in accordance with the ceiling system manufacturer's instructions.

**(B) Raceways Used as Means of Support.** Raceways shall be used only as a means of support for other raceways, cables, or nonelectric equipment under any of the following conditions:

(1) Where the raceway or means of support is identified for the purpose

(2) Where the raceway contains power supply conductors for electrically controlled equipment and is used to support Class 2 circuit conductors or cables that are solely for the purpose of connection to the equipment control circuits

(3) Where the raceway is used to support boxes or conduit bodies in accordance with 314.23 or to support luminaires (fixtures) in accordance with 410.16(F)

**(C) Cables Not Used as Means of Support.** Cable wiring methods shall not be used as a means of support for other cables, raceways, or nonelectrical equipment.

**300.22 Wiring in Ducts, Plenums and Other Air-Handling Spaces.**

The provisions of this section apply to the installation and uses of electric wiring and equipment in ducts, plenums, and other air-handling spaces.

**(A) Ducts for Dust, Loose Stock, or Vapor Removal.**

No wiring systems of any type shall be installed in ducts used to transport dust, loose stock, or flammable vapors. No wiring system of any type shall be installed in

any duct, or shaft containing only such ducts, used for vapor removal or for ventilation of commercial-type cooking equipment.

**(B) Ducts or Plenums Used for Environmental Air.**

Only wiring methods consisting of Type MI cable, Type MC cable employing a smooth or corrugated impervious metal sheath without an overall nonmetallic covering, electrical metallic tubing, flexible metallic tubing, intermediate metal conduit, or rigid metal conduit without an overall nonmetallic covering shall be installed in ducts or plenums specifically fabricated to transport environmental air. Flexible metal conduit shall be permitted, in lengths not to exceed 1.2 m (4 ft), to connect physically adjustable equipment and devices permitted to be in these ducts and plenum chambers. The connectors used with flexible metal conduit shall effectively close any openings in the connection. Equipment and devices shall be permitted within such ducts or plenum chambers only if necessary for their direct action upon, or sensing of, the contained air. Where equipment or devices are installed and illumination is necessary to facilitate maintenance and repair, enclosed gasketed-type luminaires (fixtures) shall be permitted.

**(C) Other Space Used for Environmental Air.** This section applies to space used for environmental air-handling purposes other than ducts and plenums as specified in 300.22 (A) and (B). It does not include habitable rooms or areas of buildings, the prime purpose of which is not air handling.

**Exception:** This section shall not apply to the joist or stud spaces of dwelling units where the wiring passes through such spaces perpendicular to the long dimension of such spaces.

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