

## TELECOMMUNICATIONS

### 709 CONNECTORS

### PAIR-AT-A-TIME SPLICING

A single 709 Quick Snap Connector Provides Cost Effective Pair-at-a-time Splicing. The single pair connector design reduces the number of connectors and the size of the splice bundle thus saving time, sleeve material and encapsulant.



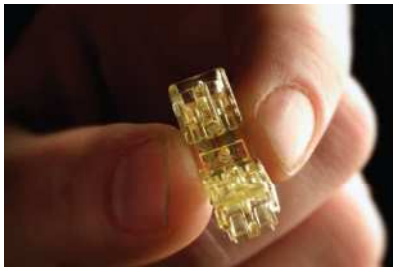
709SC



709SD



709CD

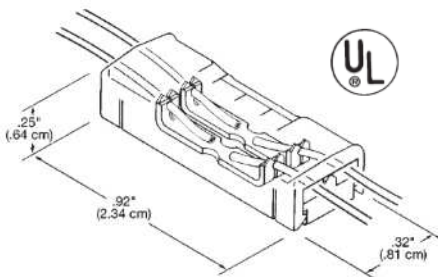


### DESIGN FEATURES

- Accommodates 22-26 gauge copper conductors
- Pair-per-connector design produces smaller, neater splice bundles
- Available with a filled, moisture resistant compound that provides protection from the elements in the Outside Plant environment
- Unfilled version provides flame retardant protection for buildings and cable entrance applications
- Extended locking latches help improve the locking range of the connector
- Increased chamfer size improves the seating of the contacts and prevents movement within the connector
- Minimum installation effort required
- USDA Rural Development Listed
- UL Listed

### ORDERING INFORMATION

CATALOG NUMBER	DESCRIPTION	QTY PER CARTON	ORDER BY
<b>709 CONNECTORS</b>			
709SC	Filled 709 Connector (Pink)	200	Carton
709SD	Dry, Flame Retardant 709 Connector (Yellow)	200	Carton
709CD	Half-tap Adapter for 709 Connector (White)	400	Carton



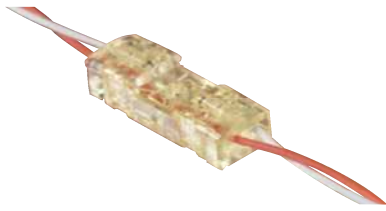
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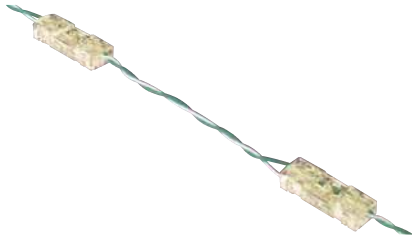
DATA SHEET # CDS-709

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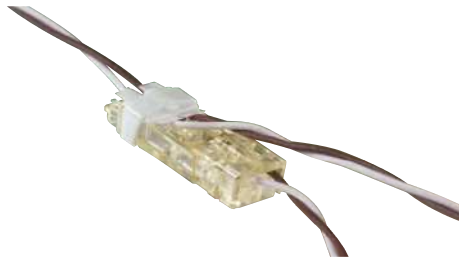
## APPLICATIONS



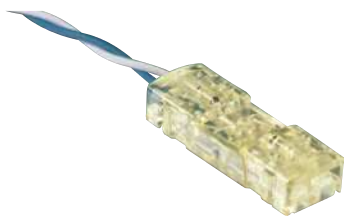
Straight splicing of small pair count cables where larger modules are inconvenient



Resplicing or piecing out when making repairs. No slack is required and the completed wire joint does not take significant space in a splice



Half tapping by joining terminal blocks to distribution cable pairs or making wire splices.

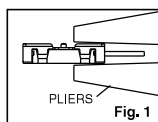


Dead ending cable pairs at cable ends or taper points

### INSTALLATION

#### Splicing:

1. **DO NOT** remove wire insulation.
  2. Raise end covers and fully insert pair approximately 1/2".
  3. Press connector covers closed with parallel jaw pliers until both latches are secure (Fig. 1).
- Do not use excessive force.



## SPECIFICATION

### Dielectric Strength

Withstands the following: 60 Hz AC voltages for at least one minute

CONNECTOR TYPE	AC-KV	
	PAIR TO PAIR	TIP TO RING
Filled	3.0	3.0
Unfilled	1.5	1.5

### Contact Resistance

Using a maximum criterion of two milliohms per connection there will be no more than one failure per 10,000 connections over the life of the installation

### Pull Strength

Connected wire withstands the following axially applied force:

WIRE GAUGE	% BREAKING STRENGTH
26	80
24	70
22	50

### Temperature

Withstands 1024 cycles from -40°C (-40°F) to 60°C (140°F).

Cycle is 2 hours with 1/2 hour dwells at extreme temperatures

### Humidity

Withstands 300 cycles from 4°C (40°F) to 60°C (140°F) at 95% relative humidity. Cycle is 12 hours with about a 5 hour dwell at extreme temperatures

### Insulation Resistance

Greater than  $20 \times 10^9$  ohms at 250 V DC

### Insulation Diameter

Will accommodate wire sizes up to .054 inches (1.37 mm) in diameter. This includes 22 gauge HDPE.

### 709SC Gel Specifications – include the following

- Shelf Life: 2 years @ 32.2°C (90°F)
- Dielectric Resistance: 1 KVA @ 5mm
- Boiling Point: 310°C (590°F)
- Melting Point: 95°C (203°F)
- Freezing Point: -30°C (-22°F)
- Specific Gravity: 0.94

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