

# MC-PCS Duo™

## Power & Control/Signal Cable



**Copper Power & Control/Signal Conductors. Power: 12 AWG & 10 AWG Copper THHN/THWN Insulated Singles. Signal: 16 AWG Copper TFN Insulated Singles. Green Copper THHN Insulated Ground. UL Listed. 600 Volts. Rated VW-1. Lightweight Aluminum Interlocked Armor. Southwire® MC-PCS Duo™ Cable meets the NEC and UL listing requirements for combining power/lighting circuits and Class 2 or Class 3 signal or control circuits in the same cable.**

### APPLICATIONS

**MC-PCS Duo™ Cable is suitable for use as follows:**

- Circuits for branch power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Power, lighting, control, and signal circuits.
- LED lighting with 0-10V dimming.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Environmental air-handling spaces per NEC 300.22 (C).
- Places of Assembly per NEC 518.4 and theaters per NEC 520.5.
- Installation in cable tray and approved raceways.
- Under raised floors for information technology equipment conductors and cables per NEC 645.5(D) & 645.5(D)(2).
- Class I Div. 2, Class II Div. 2, & Class III Div. 1 Hazardous Locations.

### STANDARDS & REFERENCES

**MC-PCS Duo™ Cable meets or exceeds the requirements of:**

- UL 83
- UL 1569 (Including new Sections 9.4, 40.1(q), and 41.1(r) as detailed in the latest UL 1569 CRD)
- UL 1685
- Federal Specification A-A59544 (formerly J-C-30B)
- NFPA 70 (National Electrical Code), Article 330 and 725.136(I)(1) & (2) as described in the latest UL 1569 CRD
- Listed for use in UL 1, 2 and 3 Hour Through Penetration Firestop Systems
- Passes both "UL Test" & "FT4/IEEE 1202" (70,000 Btu/hr) Vertical Cable Tray Flame Test
- REACH/RoHS-2 (Chemical Limit) Compliant

### CONSTRUCTION

MC-PCS Duo™ Cable is constructed with 12 AWG or 10 AWG CU Type THHN/THWN power and ground conductors along with a control conductor assembly composed of a 30 mil PVC jacket covering two 16 AWG CU Type TFN control conductors. The phase conductors, ground, and control conductor assembly are cabled together and a binder tape bearing the print legend is wrapped around the assembly. Aluminum interlocking armor is applied over the taped assembly. Yellow stripe/blocks are printed on the outside of the armor and the print legend is applied in black print on every 4<sup>th</sup> yellow stripe/block. Also available with overall PVC jacket.



CONDUCTOR SIZE AND COLORS	GROUNDING SIZE AND COLOR	STOCK NUMBER		WEIGHT (LBS/1000')	OVERALL DIAMETER (INCHES)
		COIL (250')	REEL (1000')		
SOLID CONDUCTOR COLORS 120/208V					
12-2 SOLID (BLACK/WHITE) 16-2 SOLID (PURPLE/PINK)	12 SOLID (GREEN)	59-22-40-01	59-22-40-02	147	.608
12-2 SOLID (RED/WHITE) 16-2 SOLID (PURPLE/PINK)	12 SOLID (GREEN)	59-22-41-01	59-22-41-02	147	.608
12-2 SOLID (BLUE/WHITE) 16-2 SOLID (PURPLE/PINK)	12 SOLID (GREEN)	59-22-43-01	59-22-43-02	147	.608
12-3 SOLID (BLACK/RED/WHITE) 16-2 SOLID (PURPLE/PINK)	12 SOLID (GREEN)	59-22-51-01	59-22-51-02	173	.643
10-2 SOLID (BLACK/WHITE) 16-2 SOLID (PURPLE/PINK)	10 SOLID (GREEN)	59-22-55-01	59-22-55-02	192	.663
STRANDED CONDUCTOR COLORS 120/208V					
12-2 STRANDED (BLACK/WHITE) 16-2 SOLID (PURPLE/PINK)	12 STRANDED (GREEN)	59-22-59-01	59-22-59-02	153	.623
12-3 STRANDED (BLACK/RED/WHITE) 16-2 SOLID (PURPLE/PINK)	12 STRANDED (GREEN)	59-23-18-01	59-23-18-02	181	.698
SOLID CONDUCTOR COLORS 277/480V					
12-2 SOLID (BROWN/GRAY) 16-2 SOLID (PURPLE/PINK)	12 SOLID (GREEN)	59-22-45-01	59-22-45-02	147	.58
12-2 SOLID (ORANGE/GRAY) 16-2 SOLID (PURPLE/PINK)	12 SOLID (GREEN)	59-22-47-01	59-22-47-02	147	.58
12-2 SOLID (YELLOW/GRAY) 16-2 SOLID (PURPLE/PINK)	12 SOLID (GREEN)	59-22-49-01	59-22-49-02	147	.58
12-3 SOLID (BROWN/ORANGE/GRAY) 16-2 SOLID (PURPLE/PINK)	12 SOLID (GREEN)	59-22-53-01	59-22-53-02	173	.62
10-2 SOLID (BROWN/GRAY) 16-2 SOLID (PURPLE/PINK)	10 SOLID (GREEN)	59-22-57-01	59-22-57-02	192	.65
STRANDED CONDUCTOR COLORS 277/480V					
12-2 STRANDED (BROWN/GRAY) 16-2 SOLID (PURPLE/PINK)	12 STRANDED (GREEN)	59-22-61-01	59-22-61-02	153	.623
12-3 STRANDED (BROWN/ORANGE/GRAY) 16-2 SOLID (PURPLE/PINK)	12 STRANDED (GREEN)	59-23-21-01	59-23-21-02	181	.698
10/2 STRANDED (BROWN/GRAY) 16-2 SOLID (PURPLE/PINK)	10 STRANDED (GREEN)	-	64-39-41-02	200	.683
10/2 STRANDED (ORANGE/GRAY) 16-2 (PURPLE/PINK)	10 STRANDED (GREEN)	-	64-39-43-02	200	.683
10/2 STRANDED (YELLOW/GRAY) 16-2 (PURPLE/PINK)	10 STRANDED (GREEN)	-	64-39-45-02	200	.683

The Power of Connections.™



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Consult NEC 310.15 for ampacities.  
Other constructions available upon request.

## FEATURES

- Full compliance with NEC 330, NEC 725, and UL 1569
- 16 AWG signal wiring for 0-10V dimming.
- Circuit Identification printed directly on the armor
- Available in 250' coils, 1000' reels, barrels, boxes, or prefab assemblies
- Available with steel armor
- Available with overall PVC jacket
- UL Classified 1, 2, and 3 hour Through Penetration Firestop Systems: W-J-3037, W-L-3110, W-L-3113, W-L-3117, W-L-3120, W-L-3121, W-L-3160, C-AJ-3115, C-AJ-3140, C-AJ-3142, C-AJ-3145, C-AJ-3173, C-AJ-3202, C-AJ-4065, C-AJ-4066, F-C-3038.
- Cable reverse wound on reel for ease of pulling and installation. When pulling from coils, pull from inside to ensure ease of installation.
- Anti-short bushings are not required for use with Type MC Cable per the NEC and UL.