# MC-PCS-HCF Cable

#### **Power & Control/Signal Cable for Healthcare Facilities**



Lightweight Aluminum Interlocked Armor. 600 Volts. Copper Power & Control Conductors. THHN/THWN & TFN Insulated Singles. Green Insulated Grounding Conductor. Full-Sized Aluminum Equipment Grounding/Bonding Conductor. Power: 12 AWG & 10 AWG. Control: 16 AWG. Rated VW-1. Rated 90°C Dry Locations. Southwire® MC-PCS-HCF 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-HCF Cable is suitable for use as follows:

- Branch-circuit wiring for general purpose, non-essential electrical systems in patient care areas of hospitals, medical and other health care facilities. Such areas include nursing homes, dental offices, and outpatient facilities.
- Use in hazardous anesthetizing areas and essential electrical system circuits are prohibited, except where permitted per 2008 NEC<sup>®</sup> 517.30(C)(3)(3).
- Power, lighting, control, and signal circuits requiring redundant, dedicated, or isolated grounding paths.
- 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-HCF 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)
- National Electrical Code (NFPA 70) (Specifically NEC 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

The power conductors, insulated green ground, and signal conductor assembly are cabled together and a binder tape bearing the print legend is wrapped around the cabled assembly. A bare aluminum grounding/bonding conductor is located outside the binder tape, has the same lay as the insulated conductors, and maintains intimate contact with the overall armor. Green aluminum interlocking armor is applied over the cabled assembly. Yellow stripe/blocks are printed on the outside of the armor and circuit identifying print is applied on every fourth yellow stripe/block. The cable is also available with steel armor or with an overall PVC jacket and comes in 250-foot coils, 1000-foot reels, boxes, or prefab assemblies.

The Power of Connections.™





CONDUCTOR SIZE AND COLORS	GROUNDING SIZE		STOCK NUMBER		WEIGHT	OVERALL
	INSULATED GROUND	BONDING GROUND	COIL (250')	REEL (1000')	(LBS/1000')	DIAMETER (INCHES)
	SOLID	CONDUCTOR C	OLORS 120/208	3V		
12-2 SOLID (BLACK/WHITE) 16-2 SOLID (PURPLE/GRAY)	12 SOLID (GREEN)	10 SOLID ALUMINUM	59-81-27-01	59-81-27-02	172	.58
12-2 SOLID (RED/WHITE) 16-2 SOLID (PURPLE/GRAY)	12 SOLID (GREEN)	10 SOLID ALUMINUM	59-76-57-01	59-76-57-02	172	.58
12-2 SOLID (BLUE/WHITE) 16-2 SOLID (PURPLE/GRAY)	12 SOLID (GREEN)	10 SOLID ALUMINUM	59-76-59-01	59-76-59-02	172	.58
12-3 SOLID (BLACK/RED/WHITE) 16-2 SOLID (PURPLE/GRAY)	12 SOLID (GREEN)	10 SOLID ALUMINUM	59-76-65-01	59-76-65-02	199	.62
10-2 SOLID (BLACK/WHITE) 16-2 SOLID (PURPLE/GRAY)	10 SOLID (GREEN)	8 SOLID ALUMINUM	59-76-69-01	59-76-69-02	224	.64
	STRANDE	CONDUCTOR	R COLORS 120/2	208V		
12-2 STRANDED (BLACK/WHITE) 16-2 SOLID (PURPLE/GRAY)	12 STRANDED (GREEN)	10 SOLID ALUMINUM	59-76-73-01	59-76-73-02	178	.59
12-3 STRANDED (BLACK/RED/WHITE) 16-2 SOLID (PURPLE/GRAY)	12 STRANDED (GREEN)	10 SOLID ALUMINUM	59-76-77-01	59-76-77-02	208	.64
	SOLID	CONDUCTOR C	OLORS 277/480	V		
12-2 SOLID (BROWN/GRAY) 16-2 SOLID (PURPLE/GRAY)	12 SOLID (GREEN)	10 SOLID ALUMINUM	59-81-29-01	59-81-29-02	172	.58
12-2 SOLID (ORANGE/GRAY) 16-2 SOLID (PURPLE/GRAY)	12 SOLID (GREEN)	10 SOLID ALUMINUM	59-76-61-01	59-76-61-02	172	.58
12-2 SOLID (YELLOW/GRAY) 16-2 SOLID (PURPLE/GRAY)	12 SOLID (GREEN)	10 SOLID ALUMINUM	59-76-63-01	59-76-63-02	172	.58
12-3 SOLID (BROWN/ORANGE/GRAY) 16-2 SOLID (PURPLE/GRAY)	12 SOLID (GREEN)	10 SOLID ALUMINUM	59-76-67-01	59-76-67-02	199	.62
10-2 SOLID (BROWN/GRAY) 16-2 SOLID (PURPLE/GRAY)	10 SOLID (GREEN)	8 SOLID ALUMINUM	59-76-71-01	59-76-71-02	224	.64
	STRANDE	D CONDUCTOR	R COLORS 277-	480V		
12-2 STRANDED (BROWN/GRAY) 16-2 SOLID (PURPLE/GRAY)	12 STRANDED (GREEN)	10 SOLID ALUMINUM	59-76-75-01	59-76-75-02	178	.59
12-3 STRANDED (BROWN/ORANGE/GRAY) 16-2 SOLID (PURPLE/GRAY)	12 STRANDED (GREEN)	10 SOLID ALUMINUM	59-76-79-01	59-76-79-02	208	.64



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#### **FEATURES**

- Full compliance with NEC 330, NEC 725, and UL 1569
- Redundant ground path for patient care areas per NEC 517.13(A) & (B)
- Installation instructions included with every reel and coil
- Simplified armored product application and installation
- Armor ground path is approximately 3.5 times better than Type AC HCF Cable and is equivalent to a green insulated copper grounding conductor.
- Available in 250' coils, 1000' reels, barrels, boxes, or prefab assemblies
- Available with steel armor
- Available with overall PVC jacket
- Available in neutral-per-phase and multi-circuit configurations
- 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.

