



### FIRE ALARM MC CABLE , SHIELDED AND NONSHIELDED COPPER THHN OR TFN CONDUCTORS, INTERLOCKED ARMOR TYPE MC 90C DRY 600VOLTS, TYPE FPLP 105C DRY 300VOLTS

**CONSTRUCTION:**

**CONDUCTOR** SOLID SOFT DRAWN BARE COPPER.

**INSULATION** PVC/NYLON. CONDUCTOR SIZES 14 AND LARGER ARE TYPE THHN. SIZES 16 AND SMALLER ARE TYPE TFN.

**GROUND** SOLID COPPER CONDUCTOR WITH GREEN PVC/NYLON. SHIELDED CONSTRUCTIONS MAY ALSO USE DRAIN(S) FOR GROUND.

**SHIELDING (WHERE APPLICABLE)** INSULATED CONDUCTORS TWISTED INTO PAIRS AND SHIELDED WITH ALUMINUM / MYLAR FOIL AND TINNED COPPER DRAIN WIRE.

**ASSEMBLY** INSULATED CONDUCTORS TWISTED TOGETHER WITH CABLE TAPE.

**ARMOR** ALUMINUM INTERLOCKED ARMOR APPLIED OVER CABLE ASSEMBLY.\* ARMOR COLORED RED WITH PAINT OR TAPE.

Charlotte Wire Part#	Cable Configuration	Color Code	Ground/Drain Size (AWG)	Overall Diameter (in.)	Approx. Net Wt. (Lbs/Mft)
CW18030	2/c #18 Nonshielded	Black-White	1 - #18	.41"	61
CW18031	4/c #18 Nonshielded	Black-White-Red-Blue	1 - #18	.44"	79
CW18032	6/c #18 Nonshielded	Black-White-Red-Blue-Brown-Yellow	1 - #18	.48"	95
CW18033	8/c #18 Nonshielded	Blk-Wht-Red-Blue-Brn-Ylw-Gry-Org	1 - #18	.51"	115
CW18034	2/c #16 Nonshielded	Black-White	1 - #16	.42"	72
CW18035	4/c #16 Nonshielded	Black-White-Red-Blue	1 - #16	.46"	98
CW18036	6/c #16 Nonshielded	Black-White-Red-Blue-Brown-Yellow	1 - #16	.51"	130
CW18037	8/c #16 Nonshielded	Blk-Wht-Red-Blue-Brn-Ylw-Gry-Org	1 - #16	.55"	160
CW18038	2/c #14 Nonshielded	Black-White	1 - #14	.46"	89
CW18039	4/c #14 Nonshielded	Black-White-Red-Blue	1 - #14	.51"	125
CW18040	6/c #14 Nonshielded	Black-White-Red-Blue-Brown-Yellow	1 - #14	.52"	159
CW18041	8/c #14 Nonshielded	Blk-Wht-Red-Blue-Brn-Ylw-Gry-Org	1 - #14	.59"	198
CW18042	2/c #12 Nonshielded	Black-White	1 - #12	.49"	115
CW18043	3/c #12 Nonshielded	Black-White-Red	1 - #12	.52"	140
CW18044	4/c #12 Nonshielded	Black-White-Red-Blue	1 - #12	.55"	170
CW18045	1 Shielded Pair #18	Black-White	1-#18Tinned Drain	.41"	61
CW18046	2 Shielded Pair #18	1st Pair Black-Wht, 2nd Pair Blue-Red	2-#18Tinned Drains	.57"	99
CW18047	1 Shielded Pair #16	Black-White	1-#18Tinned Drain	.43"	72
CW18048	2 Shielded Pair #16	1st Pair Black-Wht, 2nd Pair Blue-Red	2-#18Tinned Drains	.50"	119
CW18049**	1 Shielded Pair #14	Black-White	#14Grn Gnd & 1 Drain	.47"	90
CW18050**	2 Shielded Pair #14	1st Pair Black-Wht, 2nd Pair Blue-Red	#14Grn Gnd & 2 Drains	.66"	156
CW18051	1 Shielded Pair #12	Black-White	1-#12Tinned Drain	.50"	117
CW18052	2 Shielded Pair #12	1st Pair Black-Wht, 2nd Pair Blue-Red	2-#12Tinned Drains	.75"	215

\*To specify Galvanized Steel Interlocked Armor, add suffix "GIA" to Charlotte Wire Part Number.

\*\*Alternate construction may include larger drains with no additional green ground.

**APPLICATION:**

May be used in fire alarm circuits, including alarms, signal devices, horns, bells, and fire alarm control equipment per NEC Article 760. Suitable for wiring in environmental air-handling per NEC Article 300.22(B)&(C). Interlocked armor cables provide excellent corrosion resistance and mechanical protection. Per NEC Article 330, may be used 1) indoors (exposed or concealed), and dry locations, including being embedded in plaster finish on brick or other masonry.

**STANDARDS:**

UL 83 for Type THHN; UL 66 for Type TFN.  
UL1569 for Type MC Cables.  
UL1479 for Fire Test of Penetration Firestops.  
UL1424 for Power-limited Fire Alarm Circuits.  
NEC Article 330 for Metal-Clad Cable.  
NEC Article 760: Type FPLP.