



**LOW SMOKE INSTRUMENT CABLE - #18AWG (SPOS & STOS)
SINGLE SHIELDED PAIR/TRIAD AND MULTIPLE SHIELDED PAIRS &
TRIADS WITH OVERALL SHIELD TYPE TC 90DEG C 600VOLTS**

CONSTRUCTION:

CONDUCTOR 7 STRANDED TINNED COPPER.

INSULATION THERMOSETTING FLAME RETARDANT CROSSLINKED POLYETHYLENE (XLP).

CONDUCTOR SINGLE PAIR/TRIAD: PAIR IS CODED BLACK-WHITE AND TRIAD IS COLOR CODED BLACK-WHITE-RED.

IDENTIFICATION MULTIPAIRS/TRIADS: PAIRS ARE CODED BLACK-WHITE AND TRIADS ARE CODED BLACK-WHITE-RED. ONE CONDUCTOR IN EACH PAIR OR TRIAD IS ALSO NUMBERED.

PAIRS/TRIADS INSULATED CONDUCTORS TWISTED INTO PAIRS OR TRIADS AND SHIELDED WITH ALUMINUM/MYLAR TAPE SHIELD AND STRANDED TINNED COPPER DRAIN WIRE.

OVERALL SHIELD MULTIPLE SHIELDED PAIRS/TRIADS CABLED TOGETHER WITH OVERALL ALUMINUM/MYLAR TAPE SHIELD AND STRANDED TINNED DRAIN.

JACKET BLACK SUNLIGHT RESISTANT, FLAME RETARDANT, LOW SMOKE ZERO HALOGEN CROSSLINKED POLYOLEFIN (XLPO).

Charlotte Wire Part# *	Size AWG	Number of Pairs**	Number of Triads**	Insulation Thickness (in.)	Jacket Thickness (in.)	Overall Diameter (in.)	Approx. Net Wt. (Lbs/Mft)
CW05501	18	1		.030"	.045"	.32"	47
CW05502	18	2		.030"	.045"	.52"	94
CW05504	18	4		.030"	.060"	.64"	170
CW05505	18	8		.030"	.060"	.86"	330
CW05506	18	12		.030"	.080"	1.04"	445
CW05507	18	16		.030"	.080"	1.15"	560
CW05508	18	20		.030"	.080"	1.27"	680
CW05509	18	24		.030"	.080"	1.46"	800
CW05510	18	36		.030"	.110"	1.67"	1130
CW05511	18		1	.030"	.045"	.35"	60
CW05512	18		2	.030"	.060"	.61"	155
CW05513	18		4	.030"	.060"	.70"	235
CW05514	18		8	.030"	.080"	.95"	440
CW05515	18		12	.030"	.080"	1.14"	615

* To specify "ER" rating, add suffix "ER" to Charlotte Wire Part Number.

**To specify Black/Red pairs or Black/Red/Blue triads, add suffix "K2" to Charlotte Wire Part Number.

APPLICATION:

Suitable for control or instrumentation circuits rated 600Volts in power plants and heavy industrial locations where flame-resistance, stability in heat, physical durability, and excellent reliability is needed. May be used as sunlight resistant, directly buried, and wet or dry locations. Per NEC Articles 336 and 392, approved for installation in

- 1) raceways and cable tray systems including ladders, troughs, channels, solid bottom trays, and other similar structures,
- 2) lighting, control, and signal circuits,
- 3) aerial locations where supported by a messenger wire,
- 4) hazardous locations per NEC Article 501 Class 1 Division 2, and
- 5) Class 1 circuits as permitted in NEC Article 725.

STANDARDS:

UL 1277 for Type TC Cables.
Passes UL & IEEE383 70,000BTU Flame Test.
ICEA S-95-658/NEMA WC70 for Nonshielded 0 - 2KV Cables.
NEC Articles 336 and 392 for Tray Cable Uses and Constructions.
TC-ER rated cables comply with crush and impact requirements of MC cable.