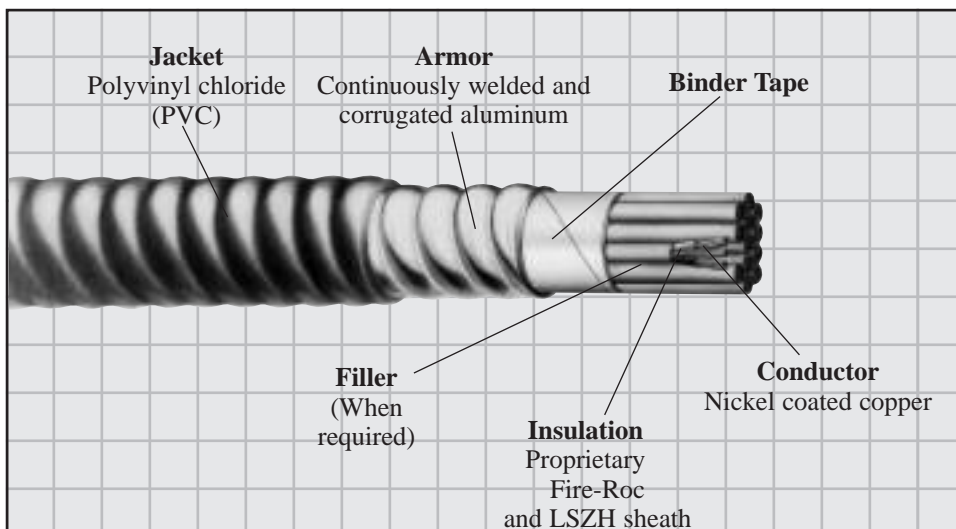


VITALink® MC/NCC

Fire Resistant Instrumentation Cable



VITALink® MC/NCC Fire Resistant Instrumentation Cable

90°C/75°C*, 600 Volt
 NEC Type MC-HL
 UL Listed
 UL Type CWCMC

Scope

VITALink® MC/NCC is a unique cable which offers superior fire endurance capabilities along with the well-established benefits and features associated with NEC Type MC-HL cable designs. This cable is suitable for use in circuits where the maintenance of circuit integrity is an

absolute necessity to allow the operation of systems or equipment vital to life or safety under emergency conditions. It has applications in the petroleum industry for MOV's, fire pumps and other critical functions where fire survivability is essential.

Features

- Replaces expensive fireproofing methods
- Low smoke, Halogen free design
- Installation ease of Type MC cables
- Utilizes commercially available MC Connectors
- Termination simplicity
- Requires conventional stripping tools
- Extruded "moisture resistant" insulation
- Wide variety of sizes & configurations
- Available in long lengths
- Welded armor forms an impervious barrier
- Armor is impact & crush resistant
- Armor sheath capacity exceeds the UL requirement for equipment ground

* 90°C dry, 75°C wet per NEC

Performance Standards

- Insulation resistance is in excess of 10,000 ohms in 60 minute 2000°F flame test per Mil-W-25038 (Shake & Bake)
- Additional third party qualification for 30 minutes at 2000°F Rapid Rise Test witnessed by UL
- Passes IEC 331 flame test modified to 3 hours @ 2000°F
- UL Listed, NEC Type MC in accordance with UL Standard No. 1569 and MC-HL per UL Standard No. 2225
- UL Rated as -40°C (PVC jacket)
- Approved and marked with the "Sunlight Resistant" designation
- UL Listed for CT (Cable Tray) use
- Approved and marked with "FT-4" flame test designation
- Singles UL Type RFFH-3
- UL Listed as Type CWCMC to IEEE as IEEE 1580 and UL 1309/CSA C22.2 No. 245 as marine shipboard cable
- ABS Recognized for marine shipboard

Construction

Conductor:

Stranded, nickel coated copper

Insulation System:

Proprietary Low Smoke Zero Halogen thermoset Fire-Roc layer and thermoset low smoke zero halogen covering

Circuit Identification:

ICEA Method 3: Black insulation with printed numbers and color Black and White for pairs, Black, White and Red for triads

Pair/Triad:

Optional foil/polyester tape with drain/ground. Overall shield also available.

Binder:

Helically applied

Armor:

Continuously welded and corrugated aluminum (Copper available on request)

Outer Jacket (optional):

Low Smoke, zero halogen polyolefin or flame retardant polyvinyl chloride (PVC)

Rev. 3 (11-8-06)

VITALink® MC/NCC

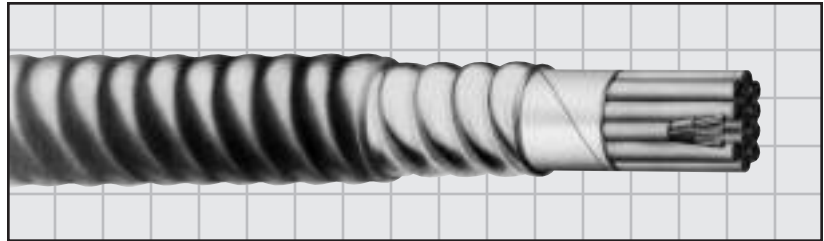
Fire Resistive Instrumentation Cable

90°C/75°C, 600 Volt

NEC Type MC-HL

UL Listed

UL Type CWCMC



Size: 16 AWG 19/.0113" nickel-coated copper, .030" low-smoke zero-halogen thermoset Fire-Roc insulation, .015" black low-smoke zero-halogen thermoset conductor jacket (nom. diameter 0.150", 3.8 mm)

| Product Code | Number of Pairs | Shields | Core Diameter | | Nominal Diameter | | Net Weight | | Minimum Bending Radii | | Ampacity |
|--------------|-----------------|---------|---------------|------|------------------|------|--------------------|--------|-----------------------|------|----------|
| | | | (mils) | (mm) | (inch) | (mm) | (Lbs. per 1000 ft) | (kg/m) | (inch) | (cm) | |
| S64-0020 | 1 | NS | 0.31 | 7.9 | 0.59 | 15.0 | 145 | 0.216 | 4.25 | 10.8 | 13 |
| S64-0021 | 1 | SP | 0.31 | 7.9 | 0.59 | 15.0 | 155 | 0.231 | 4.25 | 10.8 | 13 |
| S64-0024 | 2 | SP/OS | 0.57 | 14.5 | 0.89 | 22.6 | 285 | 0.424 | 6.25 | 15.9 | 10 |
| S64-0044 | 4 | SP/OS | 0.68 | 17.3 | 1.03 | 26.2 | 405 | 0.603 | 7.25 | 18.4 | 9 |
| S64-0084 | 8 | SP/OS | 0.93 | 23.6 | 1.30 | 33.0 | 650 | 0.967 | 9.25 | 23.5 | 7 |
| S64-0124 | 12 | SP/OS | 1.17 | 29.7 | 1.57 | 39.9 | 900 | 1.339 | 11.00 | 27.9 | 4 |
| S64-0244 | 24 | SP/OS | 1.69 | 42.9 | 2.25 | 57.2 | 1720 | 2.559 | 16.00 | 40.6 | 3 |
| S64-0504 | 50 | SP/OS | 2.37 | 60.2 | 3.09 | 78.5 | 3255 | 4.843 | 21.75 | 55.2 | 3 |

| Product Code | Number of Triads | Shields | Core Diameter | | Nominal Diameter | | Net Weight | | Minimum Bending Radii | | Ampacity (See Note) |
|--------------|------------------|---------|---------------|------|------------------|------|--------------------|--------|-----------------------|------|---------------------|
| | | | (mils) | (mm) | (inch) | (mm) | (Lbs. per 1000 ft) | (kg/m) | (inch) | (cm) | |
| S64-0030 | 1 | NS | 0.33 | 8.4 | 0.65 | 16.5 | 175 | 0.260 | 4.75 | 12.1 | 13 |
| S64-0031 | 1 | ST | 0.33 | 8.4 | 0.65 | 16.5 | 185 | 0.275 | 4.75 | 12.1 | 13 |

Shields: NS = not shielded. SP = shielded pair. ST = shielded triad. OS = overall shield.

Maximum direct current resistance of each leg of one pair or triad cable is 6.39 Ohms / 1000 feet at 20°C.

Minimum Bending Radii are instructive for permanent training.

Ampacity based on Table 310.16 of the National Electric Code for 75°C conductor temperature and 30°C ambient, adjusted for NCC conductors and with adjustment factors from Table 310.15(b)(2)(a) for not more than three current carrying conductors.