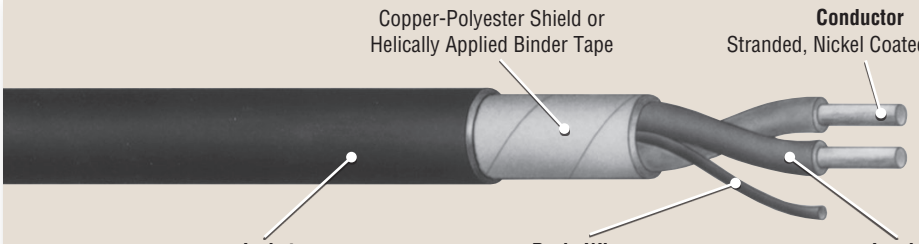
VITALink®

www.vitalinkcable.com

# VITALink® FieldBus
## Fire Resistive FieldBus Cable




90°C / 75°C*, 600 Volt
NEC Type TC-ER
CEC Type CIC & TC

UL Listed
CUL Listed

RSS-5-158

## Features

- Fire Rated
- Moisture Resistant
- Installs in steel raceway with steel fittings
- Low Smoke, Halogen free design
- Flexible for installation ease
- Easy stripability
- Available in long lengths
- No special tools, connectors, or procedures
- Easily pulled (low friction jacket)

## Scope

VITALink® FieldBus is a unique cable which offers superior fire endurance capabilities along with the well established benefits and features associated with NEC Type TC cable designs.This cable is suitable for use in FieldBus 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 FieldBus MOV instrumentation, and FieldBus communication systems.

## 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 min. @ 2000°F witnessed by UL
- Passes IEC 331 flame test modified to 3 hours @ 2000°F
- UL Listed, NEC Type TC in accordance with UL Standard No. 1277
- Approved and marked with the “Sunlight Resistant” designation
- Singles wet rated per UL44/CSA 22.2 No. 38 Section 5.4 Long Term Insulation Resistance in Water Test.
- Singles UL Type RFFH-3
- Approved and marked with the “FT-4” flame test designation
- CUL Listed as CEC Type CIC in accordance with CSA Standard C22.2 No. 239
- CUL Listed as CEC Type TC in accordance with CSA Standard C22.2 No. 230
- ABS Recognized for marine shipboard
- -ER meets the crush and impact requirement of Type MC cable and can be used per NEC 336.10 (7) for extended runs

* 90°C dry, 75°C wet per NEC

## 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:** ICEAMethod 3: Black insulation with printed numbers and color names — black and white for pairs — black, white and red for triads. In addition, legs other than black have colored stripe in the named color.

**Shielding:** Overall cable shield, accomplished by copper polyester tape shield in contact with stranded copper drain wires.

**Jacket:** Black Low-Smoke Zero Halogen Polyolefin (colors available on request)

RSCC® World Class Engineered Cable

MARMON

Marmon Engineered Wire & Cable LLC
A Berkshire Hathaway Company

# VITALink® FieldBus

## Fire Resistive FieldBus Cable

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

| Product Code | Number of Pairs | Jacket Thickness (mils) | Jacket Thickness (mm) | Nominal Diameter (inch) | Nominal Diameter (mm) | Net Weight (lbs./1000 ft.) | Net Weight (kg/m) | Minimum Bending Radii (inch) | Minimum Bending Radii (cm) |
|---|---|---|---|---|---|---|---|---|---|
| VP02016-006 | 1 | 45 | 1.14 | 0.40 | 10.2 | 75 | 0.112 | 2.00 | 5.1 |

**Also available with continuously welded and corrugated armor, (UL) MC-HL Listed for Class I Div 1 application.**

Note 1: Minimum Bending Radii are instructive for permanent training.

| | |
|---|---|
| Impedance at 31.25 KHz | 100 ohms 10% |
| Inductance at 1 KHz | 0.31 microhenries/ft |
| Capacitance C-S at 1 KHz | 50 pf/ft |
| Mutual Capacitance at 1 KHz | 25.7 pf/ft |
| Wire to shiled capacitance unbalance 1 KHz | 4 pf/ft |
| Maximum direct current resistance | 6.4 Ohms/1000 feet at 20°C |
| Shield resistance at 20°C | 6.5 ohms/1000 ft |
| Max. attenuation at 39 KHz | 3 db/km |

NOTE: All values nominal unless otherwise stated.

RSCC® World Class Engineered Cable

MARMON

Marmon Engineered Wire & Cable LLC
A Berkshire Hathaway Company