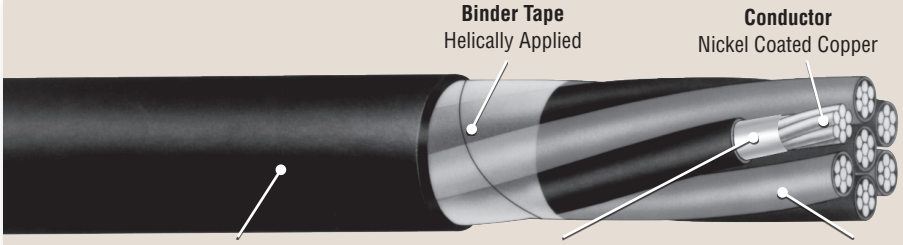
VITALink®

www.vitalinkcable.com

VITALink® 2000
Fire Resistive Control/Power Cable



90°C/75°C*, 600 Volt
NEC Type TC-ER
CEC Type RW90/R90, CIC & TC
UL Listed
CSA Listed
CUL Listed
RSS-5-157

Features

- Fire Rated
- Installed on steel tray with steel fittings
- Moisture Resistant
- Installs in steel raceway/conduit 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)
- VITALink 2000 Fire-Rated cable is patented: U.S. Patent #7538275 B2 5-26-2009

Scope

VITALink® 2000 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 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 MOVs, fire pumps and other critical functions where fire survivability is essential.

Performance Standards

* 90°C dry, 75°C wet per NEC

- Passes API 2218 flame test per UL 1709 oven test at 2000°F for 60 minutes with heat flux of 65,000 ± 5000 BTU/h – ft^2 (204 ± 16 kw/m^2)
- UL Listed, NEC Type TC in accordance with UL Standard No. 1277
- Approved and marked with the "Sunlight Resistant" designation
- Singles UL Type RHW-2 suitable for wet locations
- Approved and marked with "FT-4" flame test designation
- CSA Listed R90 in accordance with CSA C22.2 No. 38/UL44
- 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
- CUL Listed RW90 in accordance with CSA C22.2 No. 38/UL44
- 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

Construction

Conductor: Stranded, nickel coated copper
Thermal Barrier: Inorganic layer
Insulation System: Proprietary Low Smoke Zero Halogen thermoset Fire-Roc layer and thermoset low smoke zero halogen covering
Circuit Identification: ICEA Methd 3: Black single conductors with printed numbers and color name, following K-2 sequence
Ground Wire: Insulated ground wire upon request
Binder Tape: Helically applied
Jacket: Black Low-Smoke Zero Halogen Polyolefin (colors available on request)

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MARMON

Marmon Engineered Wire & Cable LLC
A Berkshire Hathaway Company

600 Volt – Multiconductor. Note: Part number for four conductors has an insulated ground (TC-ER)

Product Code	Conductor Size AWG	Jacket Thickness (inch)	Jacket Thickness (mm)	Nominal Diameter (inch)	Nominal Diameter (mm)	Net Weight (lbs./1000 ft.)	Net Weight (kg/m)	Minimum Bending Radii[1] (inch)	Minimum Bending Radii[1] (cm)	Ampacity[2] (Amps)
Size: 14 AWG – 19/0.0142" nickel-coated copper; thermal barrier layer, 0.045" thermoset ceramifiable insulation; and 0.015" black low smoke zero halogen thermoset conductor jacket (nominal diameter 0.248", 6.3 mm)										
VP03014-004	3	.060	1.52	0.68	17.3	234	0.348	2.72	6.9	15
VP04014-006	4	.060	1.52	0.74	18.8	268	0.399	2.96	7.5	15
VP07014-002	7	.080	2.03	0.93	23.6	442	0.658	3.72	9.4	10.5
VP12014-001	12	.080	2.03	1.22	31.0	703	1.046	9.76	24.8	7
Size: 12 AWG – 19/0.0179" nickel-coated copper; thermal barrier layer, 0.045" thermoset ceramifiable insulation; and 0.015" black low smoke zero halogen thermoset conductor jacket (nominal diameter 0.265", 6.7 mm										
VP02012-004	2	.060	1.52	0.68	17.3	224	0.333	2.72	6.9	18
VP03012-006	3	.060	1.52	0.72	18.3	273	0.406	2.88	7.3	18
VP04012-001	4	.060	1.52	0.78	19.8	317	0.472	3.12	7.9	18
VP07012-003	7	.080	2.03	0.98	24.9	525	0.781	3.92	10.0	12.6
Size: 10 AWG – 49/0.0142" nickel-coated copper; thermal barrier layer, 0.045" thermoset ceramifiable insulation; and 0.015" black low smoke zero halogen thermoset conductor jacket (nominal diameter 0.303", 7.7 mm)										
VP02010-001	2	.060	1.52	0.76	19.3	287	0.427	3.04	7.7	25
VP03010-002	3	.060	1.52	0.80	20.3	355	0.528	3.20	8.1	25
VP04010-002	4	.080	2.03	0.92	23.4	453	0.674	3.68	9.3	25
VP07010-004	7	.080	2.03	1.10	27.9	692	1.030	4.40	11.2	17.5
Size: 8 AWG – 133/0.0113" nickel-coated copper; thermal barrier layer, 0.060" thermoset ceramifiable insulation; and 0.030" black low smoke zero halogen thermoset conductor jacket (nominal diameter 0.392", 10.0 mm)										
VP03008-004	3	.080	2.03	1.03	26.2	550	0.818	4.12	10.5	32
VP04008-001	4	.080	2.03	1.13	28.7	665	0.990	4.52	11.5	32
Size: 6 AWG – 133/0.0142" nickel-coated copper; thermal barrier layer, 0.060" thermoset ceramifiable insulation; and 0.030" black low smoke zero halogen thermoset conductor jacket (nominal diameter 0.434", 11.0 mm)										
VP03006-004	3	.080	2.03	1.11	28.2	688	1.024	4.44	11.3	41
VP04006-003	4	.080	2.03	1.22	31.0	843	1.254	4.88	12.4	41
Size: 4 AWG – 133/0.0179" nickel-coated copper; thermal barrier layer, 0.060" thermoset ceramifiable insulation; and 0.030" black low smoke zero halogen thermoset conductor jacket (nominal diameter 0.495", 12.6 mm)										
VP03004-001	3	.080	2.03	1.24	31.5	915	1.362	4.96	12.6	53
VP04004-001	4	.080	2.03	1.37	34.8	1129	1.680	5.48	13.9	53
Size: 2 AWG – 665/0.0100" nickel-coated copper; thermal barrier layer, 0.060" thermoset ceramifiable insulation; and 0.030" black low smoke zero halogen thermoset conductor jacket (nominal diameter 0.556", 14.1 mm)										
VP03002-000	3	.080	2.03	1.37	34.8	1223	1.820	5.48	13.9	73
VP04002-000	4	.080	2.03	1.52	38.6	1526	2.271	6.08	15.4	73

[1] Minimum Bending Radii are instructive for permanent training.

[2] Ampacity based on API 14FZ for nickel-coated copper conductor (27% nickel), 75°C, 600V adjustment factors from NEC 2011 Table 310.15(b)(2)(a) for more than three current carrying conductors.

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