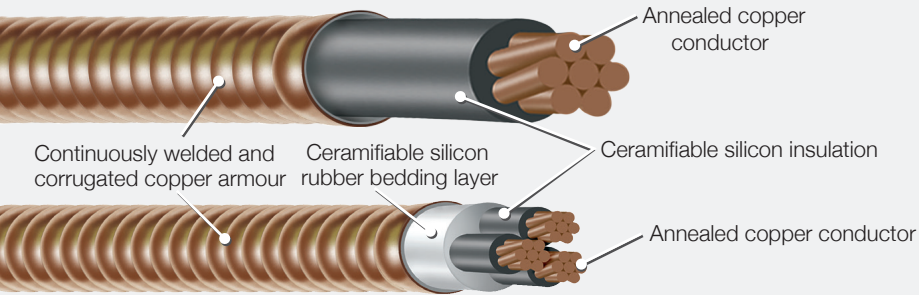


# VITALink® Power Cable

## 2-Hour Fire Rated



ULC S139 with hose stream  
90°C, 600 Volt CEC Type RC90  
CSA Listed  
UL/ULC Electrical Circuit  
Integrity System (FHIT7 120)

VITALink® is a self-contained 2-hour fire rated cable system CSA Listed as Type RC90 and Certified to ULC S139 “Tests for Fire Resistive Cables”. Installed per the Canadian Electrical Code, RSCC manufacturer’s instructions and the qualification criteria of ULC Electrical Circuit Integrity System FHIT7 120, VITALink® meets the code requirements for 2 hour Fire Rated Circuits, Electrical Circuit Protective Systems, Survivability or Circuit Integrity as applicable. We equally have Canadian approval for the FHIT7 120A and FHIT7 60.

VITALink® cables offer cost, reliability and ease of installation advantages over other methods of providing Fire Rated Circuits.

The equipment grounding copper sheath is terminated with a readily available brass connector (multiple sources) and the cable connections are made without the need for splicing or special tools. When compared to Mineral Insulated (MI) cable, VITALink® is not exposed to costly field expenses in preparing cable ends, special panel penetrations, additional flexible terminations and the splicing of shorter lengths in longer runs. VITALink® is not susceptible to voltage failures caused by moisture ingress through leaky seals or faulty storage.

Alternate methods such as encasement in 2 inches of concrete or enclosure within 2-hour fire-resistant building construction may be advantages in some applications but expensive or useless in others. It must be remembered that alternate methods do not test the electrical capability of the circuit during or after a fire but only the structural ability to prevent fire spread.

### Features

- 2-Hour Fire Rating per ULC S139 with hose stream, Horizontal & Vertical applications
- Simple termination, standard tools widely available brass connectors
- Available in long lengths
- Welded copper sheath suitable for equipment bonding per CEC rules 10-618 and 10-804
- Welded copper sheath forms impervious armor
- Suitable for wet locations

### Performance Standards

- CSA Listed type RC90 per CSA 22.2 No. 123
- 2 Hour Fire Rating per ULC S139
- Electrical Circuit Integrity System #120 (FHIT7) – ULC Canada
- Wet location rating 90°C
- Meets NFPA 130 for Transit and NFPA 502 for Tunnel applications
- Single conductor ampacity when installed per CEC Table 1

### Applications

- Fire Pumps
- Emergency Systems
- Exhaust & Pressurization fans
- Fireman’s Elevators
- Fire Alarm
- Egress elevators
- Emergency Device activation
- Lighting & Signage

Product Code	Size (AWG kcmil)	Number of Conductors	Nominal Core Diameter (In)	Nominal Armor Diameter (In)	Nominal Cable Diameter over Outer Jacket (In)	Approximate Net Weight (Lbs/1000 ft)	Ampacity 75°C   90°C	
VM02014-100	14	2	0.49	0.82	0.92	490	20	25
VM03014-100	14	3	0.52	0.82	0.92	510	20	25
VM04014-100	14	4	0.57	0.89	0.99	580	20	25
VM02012-100	12	2	0.53	0.82	0.92	522	25	30
VM03012-100	12	3	0.56	0.89	0.99	599	25	30
VM04012-100	12	4	0.62	0.94	1.04	670	25	30
VM02010-100	10	2	0.58	0.89	0.99	604	35	40
VM03010-100	10	3	0.61	0.94	1.04	685	35	40
VM04010-100	10	4	0.67	1.00	1.10	767	35	40
VM03008-100	8	3	0.72	1.04	1.14	838	50	55
VM04008-100	8	4	0.80	1.16	1.26	977	50	55
VM03006-100	6	3	0.80	1.16	1.26	1,020	65	75
VM04006-100	6	4	0.89	1.22	1.32	1,158	65	75
VM03004-100	4	3	0.91	1.24	1.34	1,246	85	95
VM04004-100	4	4	1.01	1.35	1.45	1,510	85	95
VM03003-100	3	3	0.97	1.30	1.40	1,410	100	115
VM04003-100	3	4	1.07	1.40	1.50	1,700	100	115
VM03002-100	2	3	1.04	1.38	1.48	1,649	115	130
VM04002-100	2	4	1.15	1.50	1.60	1,940	115	130
VM03001-100	1	3	1.20	1.59	1.71	1,990	130	145
VM04001-100	1	4	1.34	1.73	1.85	2,550	130	145
VM011X0-100	1/0	1	0.65	1.00	1.10	920	230	260
VM031X0-100	1/0	3	1.29	1.67	1.79	2,350	150	170
VM041X0-100	1/0	4	1.43	1.82	1.94	2,750	150	170
VM012X0-100	2/0	1	0.70	1.04	1.14	1,030	265	300
VM032X0-100	2/0	3	1.39	1.80	1.92	2,700	175	195
VM042X0-100	2/0	4	1.54	1.95	2.07	3,320	175	195
VM033X0-100	3/0	1	0.75	1.08	1.18	1,189	310	350
VM013X0-100	3/0	3	1.49	1.92	2.04	3,130	200	225
VM043X0-100	3/0	4	1.68	2.13	2.25	3,950	200	225
VM014X0-100	4/0	1	0.80	1.16	1.26	1,360	360	405
VM034X0-100	4/0	3	1.62	2.04	2.16	3,670	230	260
VM044X0-100	4/0	4	1.82	2.26	2.37	4,680	230	260
VM01250-100	250	1	0.89	1.22	1.32	1,620	405	455
VM03250-100	250	3	1.81	2.26	2.37	4,380	255	290
VM42250-100	250	4	2.01	2.46	2.61	5,470	255	290
VM01350-100	350	1	1.00	1.35	1.45	2,000	505	570
VM03350-100	350	3	2.03	2.48	2.63	6,242	310	350
VM04350-100	350	4	2.26	2.71	2.86	7,050	310	350
VM01500-100	500	1	1.12	1.48	1.58	2,575	620	700
VM03500-100	500	3	2.31	2.82	2.97	7,721	380	430
VM04500-100	500	4	2.60	3.13	3.30	9,520	380	430
VM01750-100	750	1	1.33	1.73	1.85	3,455	785	885

For other sizes and configurations not shown above please consult your Cerco Cable Customer Service Representative.

# VITALINK RC90 Copper Metal Sheath Grounding AWG Equivalency Chart

Size AWG	1 cond.	2 cond.	3 cond.	4 cond.	5 cond.	7 cond.	8 cond.	9 cond.	10 cond.	12 cond.
14		2	2	1	1	1	1	1/0	1/0	1/0
12		2	2	1	1	1	1/0	1/0	1/0	1/0
10		1	1	1	1	1/0	1/0	1/0	2/0	2/0
8		1	1	1/0	1/0	1/0	2/0			
6		1	1/0	1/0	1/0	2/0				
4			1/0	1/0	2/0					
3			1/0	2/0						
2			2/0	2/0						
1			2/0	2/0						
1/0	1		2/0	3/0						
2/0	1		3/0	3/0						
3/0	1		3/0	3/0						
4/0	1/0		3/0	3/0						
250	1/0		3/0	4/0						
350	1/0		4/0	4/0						
400	2/0		4/0	250						
500	2/0		4/0	250						
600	2/0		250							
750	2/0									