



NBC OS1  
CSA 22.1  
UL 2196/ULC S139 with Hose  
600 Volt, 90°C  
CEC Type RC90  
Systems FHIT7 120, 120A, and 60

### Applications

- Fire alarms, lighting, elevators, communication
- Fire pumps, refuge areas
- NBC OS1, NBC 3.2.7.10, NBC 3.2.6
- CSA 22.1 Article 12-700
- Wet locations
- All applications where Type RC90 is acceptable per CEC Table 19
- All applications where UL 2196/ULC S139 is required

### Features

- Up to 2-hour fire resistance
- Splice available
- Superior resistance to flame propagation
- Only conventional tools required to terminate
- Commercially available brass/stainless steel connectors
- Printed number coding allows for easy identification (ICEA Method 4)
- Labor savings on termination, installation, and handling
- Superior impact & crush resistance
- Low smoke, low toxicity, halogen free design
- Welded armor forms an impervious barrier
- Flexible
- Copper sheath can be used for equipment bonding exceeding CEC Rule 10-618 and 10-804
- Long continuous lengths available
- Multiple sizes and conductor counts available
- VFD cable design available

### Performance Standards

- UL 2196/ULC S139 – Listed as up to 2-hour fire rated with Hose Stream Systems FHIT7 120, 120A, and 60 of the ULC Fire Resistance Directory
- IEEE 1202/FT4 vertical flame test; ST1 limited smoke
- CSA 22.2 No 123 – cUL Listed as Type RC90
- Copper conductors to ASTM B8

### Overview

VITALink® RC90 is a 600V 2-hour fire rated cable listed to ULC S139 with hose stream. When installed per systems FHIT7 120, 120A, and 60, plus the CEC, VITALink® RC90 meets the code requirements for 2-hour Fire Rated Circuits, Electrical Circuit Integrity Systems, Survivability and Circuit Integrity. VITALink® RC90 Cables offer lowered cost, reliability and ease of installation advantages over MI cable and other methods of providing fire rated circuits.

The equipment grounding copper armor is terminated with commercially available brass MC/RC connectors and the cable connections are made without the need for splicing or use of special tools. Compared to Mineral Insulated (MI) cable, VITALink® RC90 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® RC90 is not susceptible to failures caused by moisture ingress through leaky seals or faulty storage.

## VITALink® RC90 Single Conductor 2-Hour Fire Rated Power Cable

Product Code	Size (AWG kcmil)	# of Cond.	Nom. Core Diameter (In)	Nom. Armor Diameter (In)	Approximate Net Weight (Lbs/1000 ft)	Ampacity 75°C/90°C Amps*
VM011X0-100	1/0	1	0.66	1.00	815	230/260
VM012X0-100	2/0	1	0.70	1.04	925	265/300
VM013X0-100	3/0	1	0.75	1.08	1,055	310/350
VM014X0-100	4/0	1	0.81	1.16	1,235	360/405
VM01250-100	250	1	0.89	1.22	1,410	405/455
VM01350-100	350	1	0.99	1.35	1,795	505/570
VM01500-100	500	1	1.13	1.50	2,350	620/700
VM01750-100	750	1	1.34	1.73	3,285	785/885

\*Ampacity per CEC Table 1

## VITALink® RC90 Multi Conductor 2-Hour Fire Rated Power Cable

Product Code	Size (AWG kcmil)	# of Cond.	Nom. Core Diameter (In)	Nom. Armor Diameter (In)	Approximate Net Weight (Lbs/1000 ft)	Ampacity 75°C/90°C Amps**
VM02014-100	14	2	0.49	0.82	395	20/25
VM02012-100	12	2	0.53	0.82	415	25/30
VM02010-100	10	2	0.58	0.89	475	35/40
VM03014-100	14	3	0.52	0.82	425	20/25
VM03012-100	12	3	0.56	0.89	475	25/30
VM03010-100	10	3	0.61	0.94	542	35/40
VM03008-100	8	3	0.72	1.04	675	50/55
VM03006-100	6	3	0.80	1.16	840	65/75
VM03004-100	4	3	0.91	1.24	1,140	85/95
VM03003-100	3	3	0.97	1.30	1,210	100/115
VM03002-100	2	3	1.04	1.41	1,400	115/130
VM03001-100	1	3	1.21	1.59	1,715	130/145
VM031X0-100	1/0	3	1.29	1.67	1,990	150/170
VM032X0-100	2/0	3	1.39	1.80	2,345	175/195
VM033X0-100	3/0	3	1.49	1.92	2,755	200/225
VM034X0-100	4/0	3	1.62	2.04	3,305	230/260
VM03250-100	250	3	1.80	2.26	3,870	255/290
VM03350-100	350	3	2.02	2.48	5,015	310/350
VM03500-100	500	3	2.30	2.82	6,720	380/430
VM04014-100	14	4	0.57	0.89	480	20/25
VM04012-100	12	4	0.62	0.94	575	25/30
VM04010-100	10	4	0.67	1.00	635	35/40
VM04008-100	8	4	0.80	1.16	815	50/55
VM04006-100	6	4	0.89	1.22	990	65/75
VM04004-100	4	4	1.00	1.35	1,285	85/95
VM04003-100	3	4	1.07	1.41	1,475	100/115
VM04002-100	2	4	1.15	1.50	1,710	115/130
VM04001-100	1	4	1.34	1.73	2,125	130/145
VM041X0-100	1/0	4	1.43	1.82	2,485	150/170
VM042X0-100	2/0	4	1.54	1.95	2,935	175/195
VM043X0-100	3/0	4	1.68	2.12	3,530	200/225
VM044X0-100	4/0	4	1.82	2.26	4,205	230/260
VM04250-100	250	4	2.00	2.46	4,925	255/290
VM04350-100	350	4	2.25	2.71	6,420	310/350
VM04500-100	500	4	2.60	3.13	8,740	380/430
VM05014-100	14	5	0.63	0.94	535	20/25
VM05012-100	12	5	0.68	1.00	615	25/30
VM05010-100	10	5	0.74	1.08	720	35/40
VM05008-100	8	5	0.88	1.22	930	50/55
VM05006-100	6	5	0.99	1.30	1,160	65/75
VM05004-100	4	5	1.11	1.48	1,525	85/95

\*\*CEC Table 2 for three current carrying conductors



Marmon Electrical  
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